Subject: Mathematics
Grade: 9th

Set 1

<table>
<tr><th>S.N</th><th>Folder Number & Question Code</th><th>Topic</th><th>Question with Answer Options</th><th>Image (If Any)</th><th>Correct Answer (Option-A,B,C,D)</th></tr>
<tr><td>1</td><td>2_10 Mathematics
5885</td><td>Number System</td><td>Which division will leave a remainder 2?</td><td></td><td>C</td></tr>
<tr><td colspan="6"><table>
<tr><th colspan="4">Answer Options</th></tr>
<tr><td>Option A</td><td>Option B</td><td>Option C</td><td>Option D</td></tr>
<tr><td>345 ÷ 3</td><td>536 ÷ 4</td><td>587 ÷ 5</td><td>711 ÷ 9</td></tr>
</table></td></tr>
<tr><td>2</td><td>2_10 Mathematics
5886</td><td>Number System</td><td>$(\frac{3}{5})^{-2}$ is equals to</td><td></td><td>D</td></tr>
<tr><td colspan="6"><table>
<tr><th colspan="4">Answer Options</th></tr>
<tr><td>Option A</td><td>Option B</td><td>Option C</td><td>Option D</td></tr>
<tr><td>$\frac{9}{25}$</td><td>$-\frac{9}{25}$</td><td>$\frac{9}{5}$</td><td>$\frac{25}{9}$</td></tr>
</table></td></tr>
</table>

S.N	Folder Number & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
3	2_10 Mathematics 5887	Number System	If the length of the longer line is 60 cm, the length of the shorter one is		B

Answer Options			
Option A	Option B	Option C	Option D
25 cm	22.5 cm	20 cm	18 cm

S.N	Folder Number & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
4	2_10 Mathematics 5888	Number System	Which of these is a Rational Number?		C

Answer Options			
Option A	Option B	Option C	Option D
$\sqrt{6}$	$\prod$	0.333...	$2^{1/3}$

S.N	Folder Number & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
5	2_10 Mathematics 5889	Number System	$2.5 \times 0.2 \times 0.2$ equals to		B

Answer Options			
Option A	Option B	Option C	Option D
0. 01	0. 1	1	10

<table>
<tr><th>S.N</th><th>Folder Number & Question Code</th><th>Topic</th><th>Question with Answer Options</th><th>Image (If Any)</th><th>Correct Answer (Option-A,B,C,D)</th></tr>
<tr><td rowspan="2">6</td><td>2_10 Mathematics

5890</td><td>Number System</td><td>What fractional part of 7777 is 77?</td><td></td><td>D</td></tr>
<tr><td colspan="4"><table>
<tr><th colspan="4">Answer Options</th></tr>
<tr><td>Option A</td><td>Option B</td><td>Option C</td><td>Option D</td></tr>
<tr><td>$^{1}/_{11}$</td><td>$^{1}/_{77}$</td><td>$^{1}/_{100}$</td><td>$^{1}/_{101}$</td></tr>
</table></td></tr>
<tr><td rowspan="2">7</td><td>2_10 Mathematics

5894</td><td>Number System</td><td>If we calculate the value of $\sqrt{2}$ we will get:</td><td></td><td>C</td></tr>
<tr><td colspan="4"><table>
<tr><th colspan="4">Answer Options</th></tr>
<tr><td>Option A</td><td>Option B</td><td>Option C</td><td>Option D</td></tr>
<tr><td>a terminating decimal fraction (like 1.4142)</td><td>a recurring decimal fraction (like 1.4142222...)</td><td>a non-terminating, non-recurring decimal fraction (like 1.4142....)</td><td>a non-terminating decimal fraction whose digits follow a simple pattern (like 1.4142345678...)</td></tr>
</table></td></tr>
<tr><td rowspan="2">8</td><td>2_10 Mathematics

5897</td><td>Number System</td><td>The value of $(-1)^0 - (-1)^1 - (-1)^2 - (-1)^3 - .... - (-1)^9 - (-1)^{10}$ =</td><td></td><td>A</td></tr>
<tr><td colspan="4"><table>
<tr><th colspan="4">Answer Options</th></tr>
<tr><td>Option A</td><td>Option B</td><td>Option C</td><td>Option D</td></tr>
<tr><td>1</td><td>10</td><td>11</td><td>55</td></tr>
</table></td></tr>
</table>

<table>
<tr><th>S.N</th><th>Folder Number & Question Code</th><th>Topic</th><th>Question with Answer Options</th><th>Image (If Any)</th><th>Correct Answer (Option-A,B,C,D)</th></tr>
<tr><td>9</td><td>2_10 Mathematics

5899</td><td>Number System</td><td>Aftab is checking his weight on a weighing scale. What is the reading on the scale, shown below?</td><td>
</td><td>D</td></tr>
<tr><td colspan="6"><table>
<tr><th colspan="4">Answer Options</th></tr>
<tr><td>Option A</td><td>Option B</td><td>Option C</td><td>Option D</td></tr>
<tr><td>50. 3 kg</td><td>50. 7 kg</td><td>52 kg</td><td>53. 5 kg</td></tr>
</table></td></tr>
<tr><td>10</td><td>2_10 Mathematics

5903</td><td>Number System</td><td>If one of three consecutive even integers is m + 1, another of them could be</td><td></td><td>D</td></tr>
<tr><td colspan="6"><table>
<tr><th colspan="4">Answer Options</th></tr>
<tr><td>Option A</td><td>Option B</td><td>Option C</td><td>Option D</td></tr>
<tr><td>m + 4</td><td>m + 7</td><td>m - 2</td><td>m – 3</td></tr>
</table></td></tr>
<tr><td>11</td><td>2_10 Mathematics

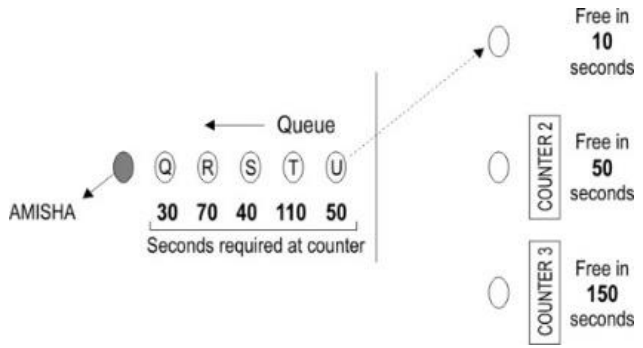
5908</td><td>Number System</td><td>For which of these values of m is 0.8×10^m a perfect cube?</td><td></td><td>C</td></tr>
<tr><td colspan="6"><table>
<tr><th colspan="4">Answer Options</th></tr>
<tr><td>Option A</td><td>Option B</td><td>Option C</td><td>Option D</td></tr>
<tr><td>9</td><td>8</td><td>7</td><td>6</td></tr>
</table></td></tr>
</table>

S.N	Folder Number & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
12	**2_10 Mathematics** **5912**	Number System	A magician gives Jack the seed of a magic bean plant. He plants the seed and records the plant's increase in height in decimeters (dm) every day. He finds that the plant's growth follows an interesting mathematical pattern: On day 1 the plant's height INCREASES by 1 dm. On day 2 the plant's height INCREASES by 2 dm. On day 3 the plant's height INCREASES by 3 dm. On day 4 the plant's height INCREASES by 4 dm. ... and so on. Based on this pattern, the HEIGHT of the plant at the END of the nth day will be		**C**

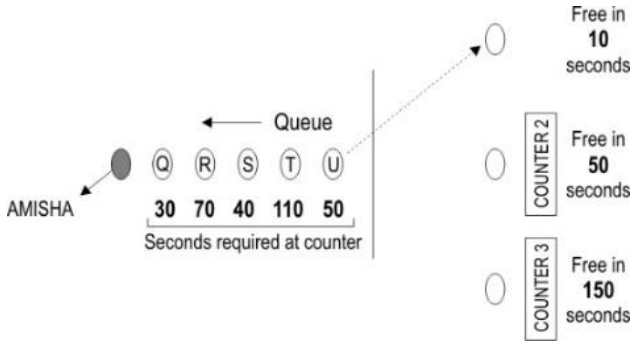
Answer Options			
Option A	Option B	Option C	Option D
n dm	n^2 dm	$\frac{n(n+1)}{2}$	10 dm

S.N	Folder Number & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
13	**2_10 Mathematics** **5914**	Number System	Badri, who collects stamps, gave half the number that he had to Varun, who had none. Varun gave half of these to Tariq, who also had none beforehand. If Tariq had given half the number he had back to Badri, the number of stamps with Badri would have been 20. How many stamps did Varun give Tariq?		**B**

Answer Options			
Option A	Option B	Option C	Option D
4	8	16	32

S.N	Folder Number & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
14	**2_10 Mathematics** **5923**	Number system	Read the situation described below and answer the question. Amisha goes to her bank to withdraw money. When she reaches, there are 5 customers Q, R, S, T and U waiting before her as shown. The time that each person requires at the counter is also shown. *The bank has 3 counters, and as each becomes free, the first person in the queue is called to that counter. (For example: The person already in counter 1 requires 10 seconds more (as shown) - then customer U will be called to Counter 1 and so on.)* How long will Amisha have to wait?		**C**

Answer Options			
Option A	Option B	Option C	Option D
50 seconds	100 seconds	160 seconds	300 seconds

S.N	Folder Number & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
15	**2_10 Mathematics** **5924**	Number System	Read the situation described below and answer the question. Amisha goes to her bank to withdraw money. When she reaches, there are 5 customers Q, R, S, T and U waiting before her as shown. The time that each person requires at the counter is also shown. *The bank has 3 counters, and as each becomes free, the first person in the queue is called to that counter. (For example: The person already in counter 1 requires 10 seconds more (as shown) - then customer U will be called to Counter 1 and so on.)* When her turn comes, which counter will service Amisha?		**B**

Answer Options			
Option A	Option B	Option C	Option D
Counter 1	Counter 2	Counter 3	Can not be said

Subject: Mathematics

Grade: 9th SET 2

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
1	3_18 Mathematics 3415	Number system	Starting with 0, a growing number sequence is generated by the rule given below. To get the next number: Substitute 0 with 01. Substitute 1 with 10. Accordingly, the first four terms of the sequence are 0---->01--------->0110------>01101001 What is the next number in the sequence?		B

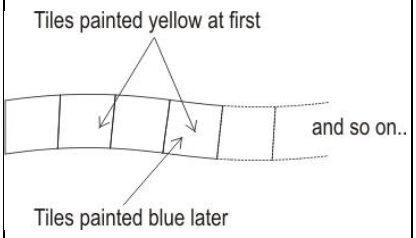
Answer Options

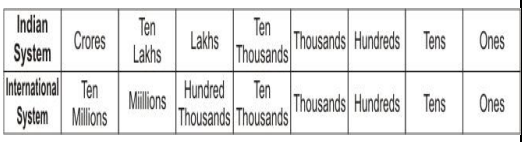
Option A	Option B	Option C	Option D
110000000000000	0110100110010110	11010011001	11010010110

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
2	3_18 Mathematics 3419	Number system	In Nirmal Public school, 28 students have joined the Chess Club and 32 have joined the Carrom Club. Among these, there are 5 students who have joined both the clubs. Altogether how many students have joined these two clubs?		B

Answer Options

Option A	Option B	Option C	Option D
50	55	60	65

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option - A,B,C,D)
3	3_18 Mathematics 3422	Number system	A pathway in Manju's garden is made of 100 white tiles arranged in a single row. Manju decides to add some colour to her garden by painting some of the tiles. Starting from one end, she paints every second tile yellow. Still not happy with the result, she proceeds to paint every second one of the YELLOW tiles blue. How many yellow tiles are there in the pathway now?		C
		Answer Options			
		Option A	Option B	Option C	Option D
		50	30	25	20
4	3_18 Mathematics 3423	Number system	A deck of playing cards consists of 52 cards. How many levels high would the highest (complete) card house that can be made with a SINGLE deck be?		B
		Answer Options			
		Option A	Option B	Option C	Option D
		4	5	6	8
5	3_18 Mathematics 3424	Number system	How many cards would be needed to make a n-level high card house?		D
		Answer Options			
		Option A	Option B	Option C	Option D
		3n	4n - 1	3n/2 + 4	$\frac{n}{2}$ (3n+1)

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
6	3_18 Mathematics 3387	Number system	The International system of naming big numbers is different from the Indian system. A comparative chart of the two systems is shown below:How will the number 'Forty million five hundred thousand and ten' be named in the Indian system?		D

Indian System	Crores	Ten Lakhs	Lakhs	Ten Thousands	Thousands	Hundreds	Tens	Ones
International System	Ten Millions	Millions	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones

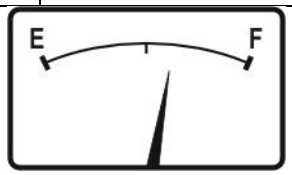
Answer Options

Option A	Option B	Option C	Option D
Forty five lakhs and ten	Forty crores five lakhs and ten	Four crores fifty lakhs and ten	Four crores five lakhs and ten

7	3_18 Mathematics 3389	Number system	Ram: What is the relationship between 150% of a number and 50% of the same number? Sheetal: 150% of the number will be three times 50% of the number - because 150 is three times 50. Sarika: Of course not. It depends on the number of which you are taking 50% and 150% Rohan: Wrong - 150% of a number will always be MORE than three times 50% of the same number. Ahmed: Well, I think 150% would be less than three times 50% of that number. Who has answered Ram's question correctly?		A

Answer Options

Option A	Option B	Option C	Option D
Sheetal	Sarika	Rohan	Ahmed

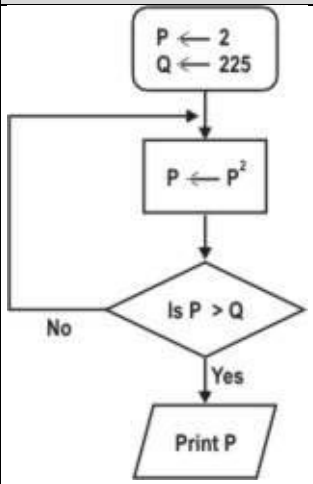
Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
8	3_18 Mathematics 3392	Number system	If the ratio of Ravi's age to John's age is 2 : 3, which of the following is true about their actual ages?		A
		Answer Options			
		Option A: John's age is $1\frac{1}{2}$ times Ravi's age	Option B: Ravi is a year younger than John	Option C: John is 3 times as old as Ravi	Option D: Ravi's age is half of John's age
9	3_18 Mathematics 3396	Number system	If n is a rational number other than 0, which of the following is NOT necessarily a rational number?		D
		Answer Options			
		Option A: 13/n	Option B: n^3	Option C: 3 - n	Option D: $\sqrt{n}$
10	3_18 Mathematics 3397	Number system	A number is called a perfect square if it is the square of a whole number. If m and n are two perfect squares, which of the following MUST also be a perfect square?		C
		Answer Options			
		Option A: m + n	Option B: 2m	Option C: 4n	Option D: $m^2 + n^2$
11	3_18 Mathematics 3398	Number system	The fuel tank of Shailaja's car has a capacity of 37 litres. One day, when she goes to the petrol station, the fuel gauge of her car looks like this: About how many litres of petrol are required to completely fill the fuel tank of Shailaja's car?		B
		Answer Options			
		Option A: 10	Option B: 14	Option C: 18	Option D: 23
Q.	Folder	Topic	Question with Answer	Image (If Any)	Correct

<table>
<tr><th>N</th><th>name & Question Code</th><th></th><th>Options</th><th></th><th>Answer (Option-A,B,C,D)</th></tr>
<tr><td>12</td><td>3_18 Mathematics 3400</td><td>Number system</td><td>Bablu's height increased by 10% over the last year. What is the ratio of his last year's height to this year's?</td><td></td><td>A</td></tr>
<tr><td></td><td></td><td colspan="3">Answer Options
Option A: 10:11 | Option B: 9:10 | Option C: 11:10 | Option D: 1:10</td><td></td></tr>
<tr><td>13</td><td>3_18 Mathematics 3403</td><td>Number system</td><td>A number N is increased by 100%. The result is then decreased by 100%. The final result will be</td><td></td><td>D</td></tr>
<tr><td></td><td></td><td colspan="3">Answer Options
Option A: 50N | Option B: N | Option C: N/2 | Option D: 0</td><td></td></tr>
<tr><td>14</td><td>3_18 Mathematics 3404</td><td>Number system</td><td>Study the values in rows X, Y and Z below. If we choose numbers x, y and z from rows X, Y and Z respectively, what is the maximum possible value of $\frac{z-y}{x}$?</td><td><table><tr><td>X</td><td>2</td><td>4</td><td>6</td><td>8</td><td>10</td></tr><tr><td>Y</td><td>3</td><td>5</td><td>7</td><td>9</td><td>11</td></tr><tr><td>Z</td><td>5</td><td>10</td><td>15</td><td>20</td><td>25</td></tr></table></td><td>D</td></tr>
<tr><td></td><td></td><td colspan="3">Answer Options
Option A: 1.4 | Option B: 5 | Option C: 7 | Option D: 11</td><td></td></tr>
<tr><td>15</td><td>3_18 Mathematics 3406</td><td>Number system</td><td>When written in decimal form, which of the following will be a non-terminating, non-recurring number?</td><td></td><td>B</td></tr>
<tr><td></td><td></td><td colspan="3">Answer Options
Option A: $1\frac{1}{9}$ | Option B: $2\frac{1}{9}$ | Option C: 2^{-9} | Option D: $9\frac{1}{2}$</td><td></td></tr>
</table>

Set 4

Subject : Maths

Grade: IX

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
1.	**5_28 Mathematics 10104**	Number Systems	How many times will P be squared in the flowchart below before printing P for the 1st time? (P← 1 means that the value of P is set to 1)		B

Answer Options			
Option A	Option B	Option C	Option D
1	3	15	225

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
2	**5_28 Mathematics 10079**	Number Systems	Assume 35.1258 x 0.4111 = 14.4402. Now if 0.0351258 x 4111 x a = 0.144402, what is the value of 'a'?		D

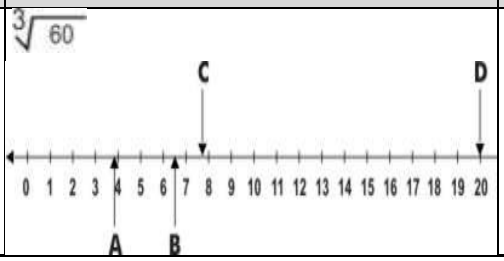
Answer Options			
Option A	Option B	Option C	Option D
10^3	10^2	10^{-2}	10^{-3}

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
3	**5_28 Mathematics 10074**	Number Systems	Which of the following will be an odd number?		D

Answer Options			
Option A	Option B	Option C	Option D
(odd number + odd number) times; odd number	(odd number+even number) + (odd number) times odd number	(odd number times; odd number) + odd number	(even number times; odd number) + odd number

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
4	**5_28 Mathematics 10075**	Number Systems	According to the 2001 census, the population of West Bengal was nearly 8.02 crores. That is equal to		B

Answer Options			
Option A	Option B	Option C	Option D
8.02 million	80.2 million	802 million	8.02 billion

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B, C,D)
5	**5_28 Mathematics 10077**	Number Systems	Which of the following shows the distance $\sqrt[3]{60}$ units (from 0) MOST accurately on the number line?		A

Answer Options			
Option A	Option B	Option C	Option D
A	B	C	D

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
7	**5_28 Mathematics 10084**	Number Systems	A certain comet is visible on earth once in every x years - that is, it has a periodicity of exactly x years. Three of the years in which it was seen are 1780, 1861 and 1987. Which of these could be the value of x?		D

Answer Options			
Option A	Option B	Option C	Option D
2	5	6	9

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
8	**5_28 Mathematics 10094**	Number Systems	Naren made a list of whole numbers in ascending order such that the 2nd number is 1 more than the 1st , the 3rd is 2 more than the 2nd, the 4th is 3 more than the 3rd and so on. If this pattern is continued, what would be the difference between the 102nd number and the 100th in the list?		C

Answer Options			
Option A	Option B	Option C	Option D
101	200	201	202

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
9	**5_29 Mathematics 11779**	Number Systems	$\frac{8^7}{-8^{-7}}$ =		D

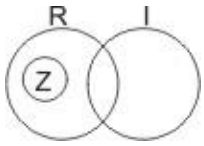
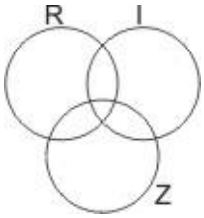
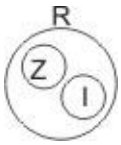
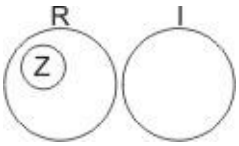
Answer Options			
Option A	Option B	Option C	Option D
0	8^{14}	8^{-49}	none of these

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
13	**5_29 Mathematics 11404**	Number Systems	If x times 0.1 = 90, what is x divided by 0.1?		D

Answer Options			
Option A	Option B	Option C	Option D
9	90	900	9000

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
14	**5_29 Mathematics 11406**	Number Systems	Which of the following diagrams is the correct diagrammatic representation of the sets of Integers (Z), Rational numbers (R) and Irrational numbers (I)?		D

Answer Options

Option A	Option B	Option C	Option D
			

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
15	**5_29 Mathematics 11407**	Number Systems	For which of these values of y will 2y be an irrational number?		D

Answer Options			
Option A	Option B	Option C	Option D
$y = \sqrt{49}$	$y = -2^{13}$	y = 22/7	$y = \sqrt{8}$

Set 3

Subject : Maths

Grade: IX

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
1	**5_26 Mathemat 1625**	Number Systems	0.000625 is the same as		D

Answer Options			
Option A	Option B	Option C	Option D
1/1000 x625	1/1000000+ 625	1000 x 625	1/1000000 x 625

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
2	**5_26 Mathematics 1627**	Number Systems	If the square of ‘x’ is 5, then square of ‘4x’ will be		B

Answer Options			
Option A	Option B	Option C	Option D
400	80	60	20

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
3	**5_26 Mathematics 1629**	Number Systems	Which of these numbers can be written as a non-terminating, repeating decimal?		A

Answer Options			
Option A	Option B	Option C	Option D
1/12	3/24	$\sqrt{3}$	11/5

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
4	**5_26 Mathematics 1636**	Number Systems	Which of the following is equal to 1?		C

Answer Options			
Option A	Option B	Option C	Option D
$17^{-2} + 17^{2}$	$17^{2} - 17^{-2}$	$17^{-2} \times 17^{2}$	$17^{2}/17^{-2}$

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
5	**5_26 Mathematics 1639**	Number Systems	If p is a non-zero Rational number, which of the following might NOT be Rational?		A

Answer Options

Option A	Option B	Option C	Option D
$\sqrt{3p}$	p^{-3}	$-p^{3}$	3/p

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
6	**5_26 Mathematics 1651**	Number Systems	The set of Natural numbers is said to be 'CLOSED' under the operation '+' because for any Natural numbers m and n, the number m + n is also a Natural number. Under which operations is the set of Integers 'CLOSED'?		B

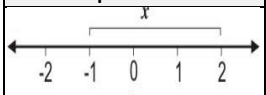
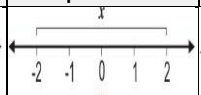
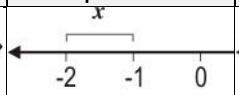
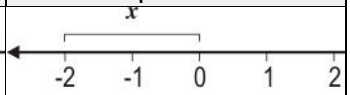
Answer Options			
Option A	Option B	Option C	Option D
+, -, x and ÷	+, - and x	only + and x	only + and -

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
7	**5_26 Mathematics 1659**	Number Systems	Which of the following numbers will have a '6' in the unit's place?		B

Answer Options			
Option A	Option B	Option C	Option D
2^6	2^{16}	2^{26}	2^{46}

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
8	**5_26 Mathematics 1648**	Number Systems	If x is such that it satisfies BOTH the inequalities: -2 <x and x≤ 2 which of the following number lines correctly depicts the values of x?		A

Answer Options

Option A	Option B	Option C	Option D
 A.	 B.	 C.	 D.

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
9	**5_27 Mathematics 8425**	Number Systems	In which of the following lists are ALL three numbers irrational?		D

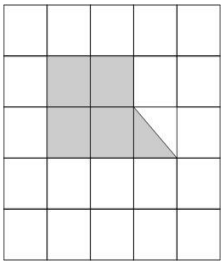
Answer Options

Option A	Option B	Option C	Option D
0, -3, 3.14	22/7 , 0.0141414....., √3	√2,√3,√4	3.919119111911119...., √5 ,π

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
10	**5_27 Mathematics 8426**	Number Systems	Scientific Notation is a concise way of writing any number in the form a x 10^b where a is a number between 1 and 10 and b is an integer. For example, 652 would be written as 6.52 x 10^2 in this notation. Which of the following is most likely to contain a negative exponent of 10 when represented in scientific notation?		C

Answer Options

Option A	Option B	Option C	Option D
Number of cells in a honeycomb	Speed of light in kilometres per second	Diameter of a blood cell in centimetres	Mass of an airplane in kilograms

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
11	**5_27 Mathematics 8427**	Number Systems	What decimal fraction of the figure below is shaded		D

Answer Options			
Option A	Option B	Option C	Option D
0.45	0.045	0.09	0.18

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
12	**5_27 Mathematics 8430**	Number Systems	Which of the following is closest to 8.413/0.19 ?		C

Answer Options			
Option A	Option B	Option C	Option D
0.44	4.4	44	440

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
13	**5_27 Mathematics 8458**	Number Systems	The numbers in the (n + 1)th row of the Pascal's triangle also represent the coefficients of the terms in the expansion of $(x + y)^n$. For instance: $(x + y)^2 = 1x^2 + 2xy + 1y^2$, $(x+y)^3 = 1x^3 + 3x^2y + 3xy^2 + 1y^3$ .The 6th row of the triangle would represent the coefficients of which of these expressions?		A

Answer Options

Option A	Option B	Option C	Option D
$(x + y)^5$	$(x + 5y)^6$	$(x + y)^6$	$(x + y)^4$

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
14	**5_27 Mathematics 8435**	Number Systems	Which of the following statements can be true for a natural number N?		B

Answer Options

Option A	Option B	Option C	Option D
When N is divided by 3, the remainder is 3 and when N is divided by 6, the remainder is 0.	When N is divided by 3, the remainder is 0 and when N is divided by 6, the remainder is 3.	When N is divided by 3, the remainder is 1 and when N is divided by 6, the remainder is 0.	All the three statements can be true.

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
15	**5_27 Mathematics 8431**	Number Systems	If 20% of your Maths score is equal to 30% of my Maths score on a test, which of the following best describes the relation between our scores?		A

Answer Options

Option A	Option B	Option C	Option D
Your score is $1\frac{1}{2}$ times mine.	My score is 1/2 times yours.	You scored 10 marks more than me.	I scored 10% more than you.

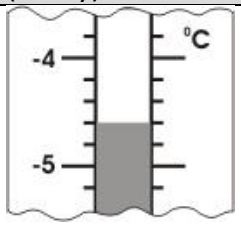
QUESTION PAPER

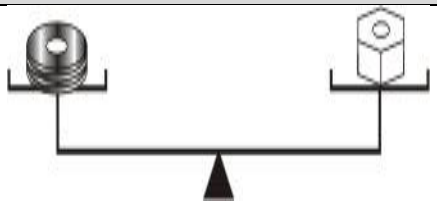
SET 3

Subject : Mathematics
Grade : IX

Q No	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option- A,B,C,D)
1	3_19 Mathematics 2770	Number system	Which is the smallest 7-digit number that is a multiple of 6?		A
		Answer Options			
		Option A	Option B	Option C	Option D
		1000002	1000003	1000005	1000006

Q No	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option- A,B,C,D)
2	3_19 Mathematics 2771	Number system	Which of the following statements is true?		D
		Answer Options			
		Option A	Option B	Option C	Option D
		$3^{40} + 3^{20} = 3^{40+20}$	$3^{12} \times 3^{10} = 3^{12\times10}$	$3^{14} + 4^{14} = (3+4)^{14}$	$3^{20} \times 3^{2} = (3^{2})^{11}$

Q No	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option- A,B,C,D)
3	3_19 Mathematics 2772	Number system	A part of a room thermometer is shown below. What temperature is the thermometer showing?		B
		Answer Options			
		Option A	Option B	Option C	Option D
		-4.3 deg C	-4.6 deg C	-5.2 deg C	-5.4 deg C

Q No	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option- A,B,C,D)
4	3_19 Mathematics 2773	Number system	The weighing scale below has 5 regular sized CD's on one side balancing a weight on the other. What is the weight on the right likely to be?		C

Answer Options			
Option A	Option B	Option C	Option D
20mg	10g	100g	300g

Q No	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option- A,B,C,D)
5	3_19 Mathematics 2774	Number system	What is the smallest number by which you have to multiply the product 3 x 4 x 5 x 11 x 15 to get a perfect square number?		A

Answer Options			
Option A	Option B	Option C	Option D
11	44	2475	9900

Q No	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option- A,B,C,D)
6	3_19 Mathematics 2775	Number system	Which of the following numbers can be written as a non-terminating but recurring decimal?		C

Answer Options			
Option A	Option B	Option C	Option D
$\frac{43}{8}$	9	$\frac{5}{12}$	$\sqrt{6}$

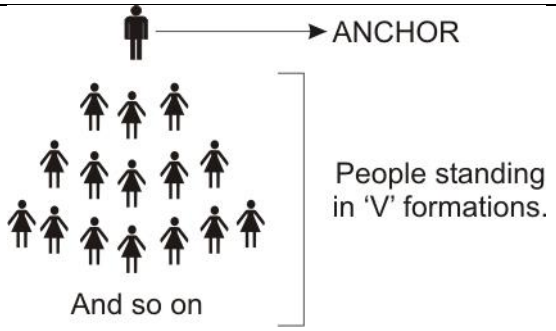
Q No	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option- A,B,C,D)	
7	3_19 Mathematics 2777	Number System	If the numerator of an expression is the sum of p, q and r and the denominator of the expression is the sum of 3p, 3q and 3r ,then expression will be reduces to		A	
		Answer Options				
		Option A	Option B	Option C	Option D	
		$\frac{1}{3}$	$\frac{1}{9}$	$\frac{1}{27}$	$\frac{1}{3pqr}$	

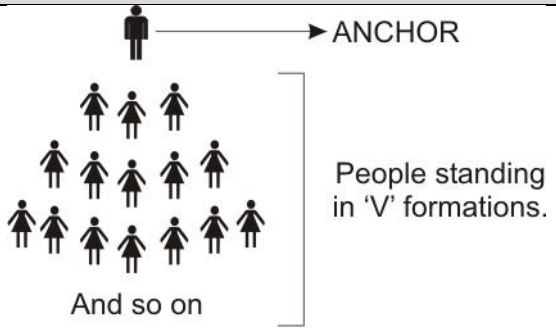
Q No	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option- A,B,C,D)	
8	3_19 Mathematics 2778	Number System	Which of these sets of consecutive numbers has a product of 54834?		B	
		Answer Options				
		Option A	Option B	Option C	Option D	
		46,47,48	37,38,39	33,34,35	22,23,24	

Q No	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option- A,B,C,D)
10	3_19 Mathematics 2785	Number system	While solving a numerical in Physics, Archana got the answer as 2.387 x 10^7 instead of 2.367 x 10^7 due to a miscalculation. By how much does her answer differ from the correct answer?		B

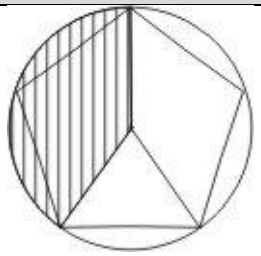
Answer Options			
Option A	Option B	Option C	Option D
20000000	200000	2000	0.02

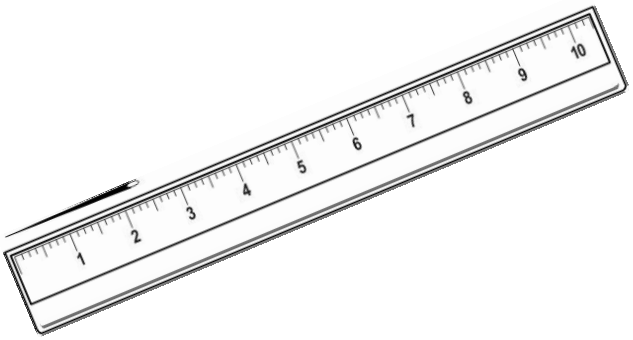
Q No	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option- A,B,C,D)

11	3_19 Mathematics 2808	Number system	At a party, one person chooses to anchor a game and everyone else stands in V formations as shown below. 3 people stand in the innermost V, 5 in the next and so on. If there are 125 people (including the anchor) at the party, how many complete V's will they be able to form?		B
		Answer Options			
		Option A	Option B	Option C	Option D
		5	10	12	21

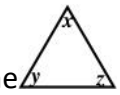
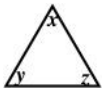
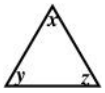
Q No	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
12	3_19 Mathematics 2809	Number system	At a party, one person chooses to anchor a game and everyone else stands in V formations as shown below. 3 people stand in the innermost V, 5 in the next and so on. If there are 125 people (including the anchor) at the party, How many MORE people would be required to complete the next V along with the remaining people?		C
		Answer Options			
		Option A	Option B	Option C	Option D
		0	13	19	23

Q No	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
13	3_18 Mathematics 3414	Number system	5 workers, working 8 hours a day, finished painting a house in 2 days. If an identical house has to be painted completely in a day by 8 workers, how many hours should they work?		B
		Answer Options			
		Option A	Option B	Option C	Option D
		11	10	8	5

Q No	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
14	2_11 Mathematics 4489	Number system	What part of this figure is shaded?		D
		Answer Options			
		Option A	Option B	Option C	Option D
		$\frac{1}{5}$	$\frac{3}{5}$	$\frac{4}{5}$	$\frac{2}{5}$

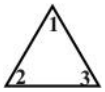
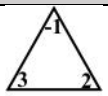
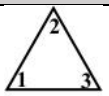
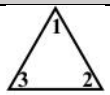
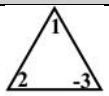
Q No	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
15	2_11 Mathematics 5295	Number system	See this scale marked in a non standard unit. Each larger unit is divided into 8 (not 10) parts. Which of the following is nearest to the length of the needle shown here?		C
		Answer Options			
		Option A	Option B	Option C	Option D
		2.3 units	2+ ¾ units	2+ 3/8 units	2.25units

Subject: Mathematics

Q.NO.	Folder Number & Question Code	Topic	Question with Answer Options			Image (If Any)	Correct Answer (Option - A,B,C,D)
1	2_11 Mathematics 4467	Number System	Shalini is making triangles with matchsticks from a box. What is the MINIMUM number of matchsticks that she will need to make a triangle with no sides equal? (Each matchstick should form a part of any side of the triangle and no matchstick should be bent or broken)				C
		Answer Options					
		Option A	Option B	Option C	Option D		
		5	6	9	11		
2 A	2_11 Mathematics 5323	Number System	Read the information given below to answer the question. Suppose, for all rational numbers x, y and z, we define  as follows:  = xy - z, if z < y and  = xz - y if y < z. What is the value of ?				D
		Answer Options					
		Option A	Option B	Option C	Option D		

<table>
<tr><td></td><td></td><td>-3</td><td>-2</td><td>0</td><td>6</td><td></td></tr>
<tr><td rowspan="5">2 B</td><td rowspan="5">2_11

Mathematics

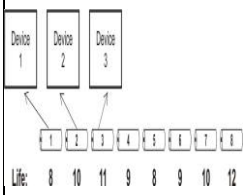
5324</td><td>Number System</td><td colspan="2">Of the following, which will have the same value as ?</td><td>  </td><td rowspan="5">C</td></tr>
<tr><td colspan="4">Answer Options</td></tr>
<tr><td>Option A</td><td>Option B</td><td>Option C</td><td>Option D</td></tr>
<tr><td>  </td><td>  </td><td>  </td><td>  </td></tr>
<tr><td>A</td><td>B</td><td>C</td><td>D</td></tr>
<tr><td rowspan="5">3 A</td><td rowspan="5">2_11

Mathematics

4493</td><td>Number System</td><td colspan="2">Answer the question based on the given information.

Ramesh works in a factory control room, where he operates three electronic devices which run on ordinary batteries.

Each device requires 1 battery, which lasts for 8-12 days depending on the battery quality.

Ramesh has a stock of 8 new batteries. The number of days each will last (though this is not known to Ramesh) is shown below.
Ramesh puts new batteries in all three devices in the order shown.
After this, as batteries run out, Ramesh replaces the old batteries from his stock IN THE SAME ORDER.
Which battery will replace battery number 2 in device 2?</td><td>  </td><td rowspan="5">B</td></tr>
<tr><td colspan="4">Answer Options</td></tr>
<tr><td>Option A</td><td>Option B</td><td>Option C</td><td>Option D</td></tr>
<tr><td>4</td><td>5</td><td>7</td><td>8</td></tr>
</table>

<table>
<tr><td rowspan="4">3 B</td><td rowspan="4">2_11

Mathematics

4494</td><td>Number System</td><td colspan="2">On which day will Ramesh have to buy a new battery?</td><td></td><td rowspan="4">B</td></tr>
<tr><td colspan="4">Answer Options</td></tr>
<tr><td>Option A</td><td>Option B</td><td>Option C</td><td>Option D</td></tr>
<tr><td>Day 16</td><td>Day 21</td><td>Day 27</td><td>Day 25</td></tr>
<tr><td rowspan="4">4</td><td rowspan="4">2_11

Mathematics
5297</td><td>Number System</td><td colspan="2">One of the numbers below can be written as 2.828427125..... (The pattern of digits does NOT repeat). Which one is it?</td><td></td><td rowspan="4">B</td></tr>
<tr><td colspan="4">Answer Options</td></tr>
<tr><td>Option A</td><td>Option B</td><td>Option C</td><td>Option D</td></tr>
<tr><td>$^{20}/_{7}$</td><td>$\sqrt{8}$</td><td>$2 + {}^{9}/_{11}$</td><td>$\sqrt{56}$</td></tr>
<tr><td rowspan="4">5</td><td rowspan="4">2_11

Mathematics

5299</td><td>Number System</td><td colspan="2">Which of the following is the best approximation for the value of $541 \div (0.098)^2$?
(Hint: You need not actually calculate.)</td><td></td><td rowspan="4">D</td></tr>
<tr><td colspan="4">Answer Options</td></tr>
<tr><td>Option A</td><td>Option B</td><td>Option C</td><td>Option D</td></tr>
<tr><td>50</td><td>5</td><td>5500</td><td>55000</td></tr>
<tr><td rowspan="4">6</td><td rowspan="4">2_11

Mathematics

5305</td><td>Number System</td><td colspan="2">$2+\sqrt{3}$ and $2-\sqrt{3}$ are both irrational numbers.
$(2+\sqrt{3})(2-\sqrt{3}) = (2)^2 - (\sqrt{3})^2 = 4-3 = 1.$

What can be said WITH CERTAINTY about the product of two irrational numbers from the above example?

The product of two irrational numbers is</td><td></td><td rowspan="4">D</td></tr>
<tr><td colspan="4">Answer Options</td></tr>
<tr><td>Option A</td><td>Option B</td><td>Option C</td><td>Option D</td></tr>
<tr><td>always a rational number.</td><td>always an irrational number.</td><td>always 1.</td><td>not necessarily an irrational number.</td></tr>
</table>

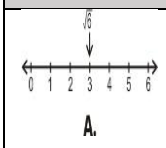
7	**2_11 Mathematics 5306**	Number System	I start with 1000 and start writing a series of numbers - subtracting 6 every time to get the next number. The series looks like this: 1000, 994, 988, 982, ...and so on. If the series is continued, which will be the first negative number to appear in it?			C
		Answer Options				
		Option A	Option B	Option C	Option D	
		-6	-4	-2	-1	
8	**2_11 Mathematics 4455**	Number System	What number does the pointer show?			C
		Answer Options				
		Option A	Option B	Option C	Option D	
		9. 4	9. 54	9. 504	9. 514	
9	**2_11 Mathematics 4456**	Number System	$8 + 27^{1/3}$ is equal to			C
		Answer Options				
		Option A	Option B	Option C	Option D	
		5	$8^{1/3}$	11	17	
10	**2_11 Mathematics 4457**	Number System	If 160 × 1. 362 = 217. 92 What is the value of 21. 792 ÷ 1. 6?			D
		Answer Options				
		Option A	Option B	Option C	Option D	
		0. 01362	0. 1362	1. 362	13. 62	
11	**2_11 Mathematics 5313**	Number System	q is a number such that -q > -2. Which of the following statements will also be true?			B
		Answer Options				
		Option A	Option B	Option C	Option D	
		q = 2	q < 2	q > 5	q > 2	

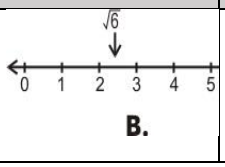
<table>
<tr><td rowspan="4">12</td><td rowspan="4">2_11

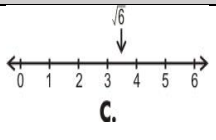
Mathematics

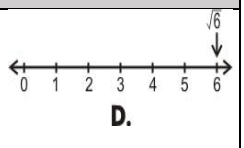
4458</td><td>Number System</td><td colspan="2">If a number is divisible by 6 and 10, it must also be divisible by _____</td><td></td><td rowspan="4">C</td></tr>
<tr><td colspan="4">Answer Options</td></tr>
<tr><td>Option A</td><td>Option B</td><td>Option C</td><td>Option D</td></tr>
<tr><td>4</td><td>16</td><td>30</td><td>60</td></tr>
<tr><td rowspan="4">13</td><td rowspan="4">2_11

Mathematics

4460</td><td>Number System</td><td colspan="2">On which number line is the position of $\sqrt{6}$ shown correctly?</td><td></td><td rowspan="4">B</td></tr>
<tr><td colspan="4">Answer Options</td></tr>
<tr><td>Option A</td><td>Option B</td><td>Option C</td><td>Option D</td></tr>
<tr><td> 

A.</td><td> 

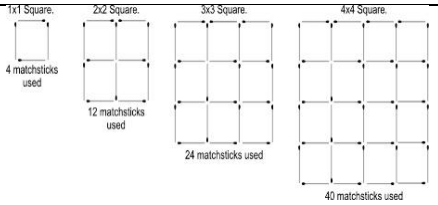
B.</td><td> 

C.</td><td> 

D.</td></tr>
</table>

Q.NO.	Folder Number & Question Code	Topic	Question with Answer Options			Image (If Any)	Correct Answer (Option - A,B, C,D)
1	2_11 Mathematics 5320	Number system	The product of 100 real numbers is -100. AT LEAST how many of these 100 real numbers must be positive?				C
		Answer Options					
		Option A	Option B	Option C	Option D		
		99	2	1	none		
2	2_11 Mathematics 4470	Number system	For which of these values of y will 2y be an irrational number?				D
		Answer Options					
		Option A	Option B	Option C	Option D		
		$y = \sqrt{49}$	y = -2/13	y = 22/7	$y = \sqrt{8}$		
3	2_11 Mathematics 5327	Number system	I have two leaking taps in my kitchen. The first tap drips once every 8 seconds and the second one drips once every 12 seconds. When any one tap drips alone, I call it a 'SINGLE DRIP' and when both drip simultaneously, I call it a 'DOUBLE DRIP'. The number of 'SINGLE DRIPS' in an interval of 100 seconds following a 'DOUBLE DRIP' will be				C
		Answer Options					
		Option A	Option B	Option C	Option D		
		3	7	12	18		

<table>
<tr><td rowspan="4">4</td><td rowspan="4">2_11
Mathematics
5329</td><td>Number System</td><td colspan="2">Shyam's father is 6 times as old as Shyam. Shyam's mother is 25 years old. The average age of this family of three is 20 years. How old is Shyam?</td><td></td><td rowspan="4">D</td></tr>
<tr><td colspan="4">Answer Options</td></tr>
<tr><td>Option A</td><td>Option B</td><td>Option C</td><td>Option D</td></tr>
<tr><td>15 years</td><td>10 years</td><td>7 years</td><td>5 years</td></tr>
<tr><td rowspan="4">5</td><td rowspan="4">2_11
Mathematics
4475</td><td>Number System</td><td colspan="2">The average of the 1st five natural numbers is</td><td></td><td rowspan="4">C</td></tr>
<tr><td colspan="4">Answer Options</td></tr>
<tr><td>Option A</td><td>Option B</td><td>Option C</td><td>Option D</td></tr>
<tr><td>2.25</td><td>2.5</td><td>3</td><td>3.5</td></tr>
<tr><td rowspan="4">6</td><td rowspan="4">2_11
Mathematics
5332</td><td>Number System</td><td colspan="2">What will be the remainder when 4^{6788} is divided by 5?</td><td></td><td rowspan="4">A</td></tr>
<tr><td colspan="4">Answer Options</td></tr>
<tr><td>Option A</td><td>Option B</td><td>Option C</td><td>Option D</td></tr>
<tr><td>1</td><td>2</td><td>3</td><td>4</td></tr>
<tr><td rowspan="4">7</td><td rowspan="4">2_11
Mathematics
5333</td><td>Number System</td><td colspan="2">See the following matchstick patterns.

How many matchsticks would be required to make a similar 10 × 10 square pattern?</td><td> 
</td><td rowspan="4">C</td></tr>
<tr><td colspan="4">Answer Options</td></tr>
<tr><td>Option A</td><td>Option B</td><td>Option C</td><td>Option D</td></tr>
<tr><td>100</td><td>200</td><td>220</td><td>500</td></tr>
<tr><td>8</td><td>2_11
Mathematics</td><td>Number System</td><td colspan="2">The pattern of numbers below forms a special sequence called the Fibonacci sequence. Study the first 7 numbers given below and understand the pattern</td><td></td><td>D</td></tr>
</table>

<table>
<tr><td></td><td>4488</td><td></td><td>1,1,2,3,5,8,13 .....

What could the next two numbers of the sequence be?</td><td></td><td></td></tr>
<tr><td></td><td></td><td colspan="4">Answer Options</td></tr>
<tr><td></td><td></td><td>Option A</td><td>Option B</td><td>Option C</td><td>Option D</td></tr>
<tr><td></td><td></td><td>18 and 23</td><td>18 and 31</td><td>21 and 26</td><td>21 and 34</td></tr>
<tr><td>9</td><td>2_11

Mathematics

4490</td><td>Number System</td><td>Mr. Malkani owns a hotel with exactly 100 rooms. The first room is numbered as 1, the second one as 2 and so on. However, being a superstitious man, he has taken care that no room in his hotel bears the number 13 or any of its multiples.

What is the room number of the 100th room in the hotel?</td><td></td><td>D</td></tr>
<tr><td></td><td></td><td colspan="4">Answer Options</td></tr>
<tr><td></td><td></td><td>Option A</td><td>Option B</td><td>Option C</td><td>Option D</td></tr>
<tr><td></td><td></td><td>87</td><td>100</td><td>107</td><td>108</td></tr>
<tr><td>10</td><td>2_11

Mathematics

4491</td><td>Number System</td><td>If x + 5 is a multiple of 3, which of the following MUST be a multiple of 9?</td><td></td><td>C</td></tr>
<tr><td></td><td></td><td colspan="4">Answer Options</td></tr>
<tr><td></td><td></td><td>Option A</td><td>Option B</td><td>Option C</td><td>Option D</td></tr>
<tr><td></td><td></td><td>$x^2 + 25$</td><td>3x + 5</td><td>(x + 5)(x + 5)</td><td>(x + 5)(x + 9)</td></tr>
<tr><td></td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>11</td><td>2_11

Mathematics</td><td></td><td>A certain whole number is multiplied by 90 and then divided by 2. Which of the following could be the result?</td><td></td><td>D</td></tr>
</table>

<table>
<tr><td></td><td>5296</td><td colspan="4">Answer Options</td><td></td></tr>
<tr><td></td><td></td><td>Option A</td><td>Option B</td><td>Option C</td><td>Option D</td><td></td></tr>
<tr><td></td><td></td><td>33228</td><td>52320</td><td>61635</td><td>26550</td><td></td></tr>
<tr><td rowspan="4">12</td><td rowspan="4">2_11

Mathematics

4492</td><td>Number System</td><td colspan="2">Adil's bathroom has two taps next to each other and a bucket is kept under them. Tap 1 alone (at full flow) can fill HALF the bucket in 2 minutes and Tap 2 alone (at full flow) can fill HALF the bucket in 3 minutes.

If both taps are turned on (to full flow), in how much time will the bucket get filled completely?</td><td></td><td rowspan="4">A</td></tr>
<tr><td colspan="4">Answer Options</td></tr>
<tr><td>Option A</td><td>Option B</td><td>Option C</td><td>Option D</td></tr>
<tr><td>2 minutes 24 seconds</td><td>2 minutes 30 seconds</td><td>5 minutes</td><td>10 minutes</td></tr>
</table>

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
13	2_11 Mathematics 4465	NUMBER SYSTEM	2. 31 × 10^{-3} can be written as		C
		Answer Options			
		Option A	Option B	Option C	Option D
		-69. 3	-2310	0. 00231	$^{1}/_{2.31} \times 10^{3}$
14	2_11 Mathematics 5298	NUMBER SYSTEM	$\frac{3 \times 10^{3}}{6 \times 10^{4}}$ is		C
		Answer Options			
		Option A	Option B	Option C	Option D
		0. 5 × $(10)^{3/4}$	0. 5 × 10	$(2 \times 10)^{-1}$	$2 \times (10)^{-1}$

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
15	5_29 Mathematics 11411	Number System	A number N is increased by 100%. The resulting number is then decreased by 100%. The final result will be		D

Answer Options			
Option A	Option B	Option C	Option D
50N	N	N^2	0

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
1	5_29 Mathematics 11413	Number System	Of all the children who attended a party, 40% were boys. 40% of the boys and 60% of the girls who attended the party chose ice cream for dessert. What percent of the children at the party chose ice cream?		A

Answer Options			
Option A	Option B	Option C	Option D
52%	50%	42%	24%

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
2	5_29 Mathematics 11428	Number System	Mr. Kaul deposits a fixed amount of money for a 5 year period. Some details of the account (Interest compounded annually) are given below: Principal on which interest is computed for the first year : Rs 40000 Interest earned for the first year : Rs 2000 Interest earned for the second year : Rs 2100 Interest earned for the third year : Rs 2205 The amount (Principal) on which the interest for the fourth year will be calculated is		C

Answer Options			
Option A	Option B	Option C	Option D
Rs 2,205	Rs 40,000	Rs 46,305	Rs 46,615

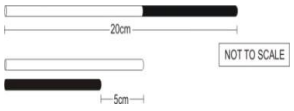
Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
4	5_26 Mathematics 1640	Number System	In December 2001, a school had 1030 students. In 2002, the strength rose by 5%. But in 2003, the strength went down by 1%. The strength of the school at the end of 2003 was		C

Answer Options

Option A	Option B	Option C	Option D
1030 x 4/100	1030(1 + 4/100)	1030(1 + 5/100)(1- 1/100)	1030 + 5/100 - 1/100

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
5	5_26 Mathematics 1647	Number System	Priti corrects the time on her watch at 8:45 a.m. But 3 hours later, it shows the time as 12 p.m.What time would her watch show when it is actually 12 p.m.?		A

Answer Options			
Option A	Option B	Option C	Option D
15 seconds past 12:16 p.m.	15 seconds past 12:01 p.m.	exactly 12:15 p.m.	exactly 12:30 p.m.

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
6	3_18 Mathematics 3385	ALGEBRA	See the measurements below with two sticks - one WHITE and one BLACK. What is the length of the black stick?		C
		Answer Options			
		Option A	Option B	Option C	Option D
		15 cm	10 cm	7. 5 cm	4. 5 cm
7	3_18 Mathematics 3386	ALGEBRA	If x + p + y = x + y + z, then which of the following MUST be true?		D
		Answer Options			
		Option A	Option B	Option C	Option D
		p = y	y = z	y = x	z = p
8	3_18 Mathematics 3388	ALGEBRA	$8^{7-}8^{-7} =$		D
		Answer Options			
		Option A	Option B	Option C	Option D
		0	8^{14}	8^{-49}	none of these
9	3_18 Mathematics 3390	ALGEBRA	If $X \times 0.1 = 90$, what is $X \div 0.1$?		D
		Answer Options			
		Option A	Option B	Option C	Option D

			9	90	900	9000	
10	3_18 Mathematics 3395	ALGEBRA	Which of the following expressions stands for the area of the rectangle shown below (in appropriate sq. units)?				D
		Answer Options					
			Option A	Option B	Option C	Option D	
			6x	6 + x	3x + 2	3(x +2)	

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
11	3_18 Mathematics 3402	ALGEBRA	If we divide $x^3 + 3x$ by x, the result will be		D
		Answer Options			
		Option A	Option B	Option C	Option D
		$x^2 + 3x$	$x^3 + 3$	$2x + 3$	$x^2 + 3$
12	3_18 Mathematics 3408	ALGEBRA	80 girls and 100 boys appeared for the class 10 board exam from Pratibha School. 25% of the girls who appeared and 10% of the boys got A grades. What percentage of the total number of students who appeared got A grades?		A
		Answer Options			
		Option A	Option B	Option C	Option D
		16.70%	17.50%	25%	35%
13	2_11 Mathematics 5303	ALGEBRA	$(x + 1)^3$ is the same as		C
		Answer Options			
		Option A	Option B	Option C	Option D
		$x^3 + 1$	$(x^2 + 1)(x + 1)$	$(x + 1)(x + 1)^2$	$x^3 + 3x^2 + 1$

14	2_11 Mathematics 4487	ALGEBRA	A factory works 6 days every week and produces x bulbs every day. On an average 7 bulbs are defective every day. How many good bulbs will be produced in y weeks?		A

Answer Options

Option A	Option B	Option C	Option D
6xy - 42y	6x - 7y	42x - 6y	(6x - 7) y

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
15	2_11 Mathematics 4469	ALGEBRA	Which of these terms will appear in the simplest form of $(2x^3 + 2x^2 + x)(x^2-2x+2)$?		B

Answer Options

Option A	Option B	Option C	Option D
$-2x^3$	x^3	$3x^3$	$6x^3$

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
1	2_11 Mathematics 4481	ALGEBRA	If $x < -2$, the LEAST possible integer value of $2 - x$ is		A

Answer Options

Option A	Option B	Option C	Option D
5	3	-1	Can't say

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
2	3_19 Mathematics 2786	ALGEBRA	Which of the following correctly describes the operation for two numbers x and y?		D

Answer Options

Option A	Option B	Option C	Option D
x* y = xy + 1	X*y = 2x + y	$x * y = (x + y)^2$	$x* \ y = x^2 + y$

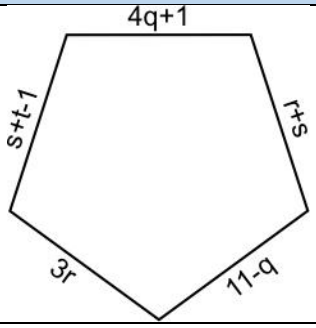
3	3_19 Mathematics 2787	ALGEBRA	Nancy thinks of an operation $x \star y = 2(x + y)$ and gives the following clues $3 \star 2 = 10$, $6 \star 1 = 14$, $5 \star 3 = 30$ Which of her clues is/are INCORRECT?		D

Answer Options

Option A	Option B	Option C	Option D
All three	Only the first one	Only the second one	Only the third one

Q. No.	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
4	2_10 Mathematics 5893	Algebra	If p - q = -9, p - r = 0. 5 and q - s = -7, the greatest of the four numbers is"		D

Answer Options				
Option A	Option B	Option C	Option D	
p	q	r	s	

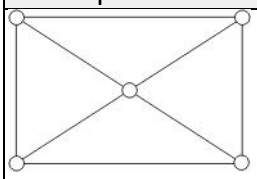
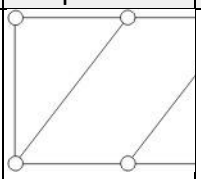
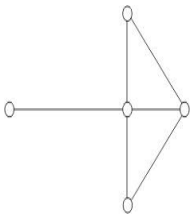
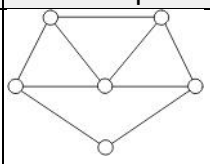
Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
5	2_11 MATHEMATICS 5316	Algebra	A regular pentagon has side lengths as shown in the figure The value of 't'		B

Answer Options

Option A	Option B	Option C	Option D
9	4	3	2

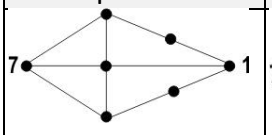
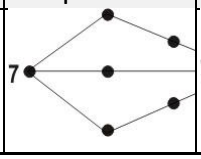
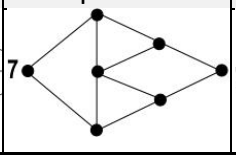
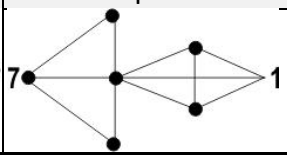
Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
6	5_27 Mathematics 8460	Coordinate Geometry	Which of the networks below can be drawn without lifting the pencil or retracing an existing line?		C

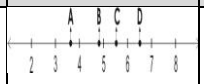
Answer Options

Option A	Option B	Option C	Option D
			

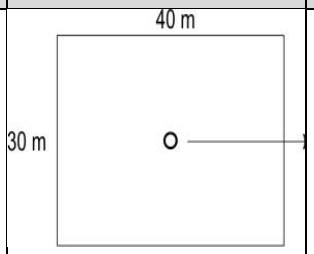
Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
7	5_27 Mathematics 8461	Coordinate Geometry	7 stalls in an exhibition have to be connected with paths in a way that will allow a visitor to start at stall 1 finish at stall 7, visiting every stall exactly once.If the dots show the stalls and the lines the paths, which network of paths is likely to be preferred?		C

Answer Options

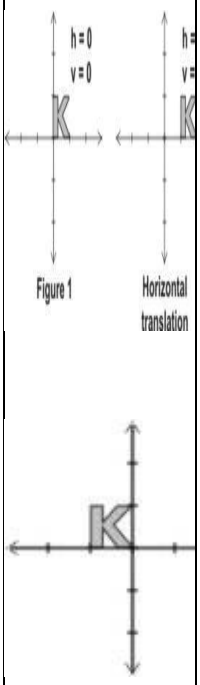
Option A	Option B	Option C	Option D
			

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
8	5_27 Mathematics 8433	Coordinate Geometry	A part of the real number line is shown. Which of the following points best represents the location of 5.5		C

Answer Options			
Option A	Option B	Option C	Option D
A	B	C	D

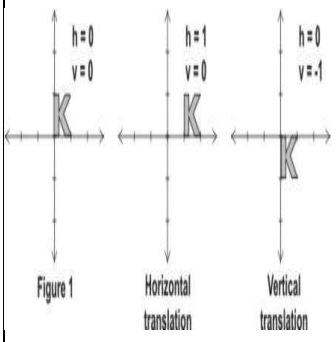
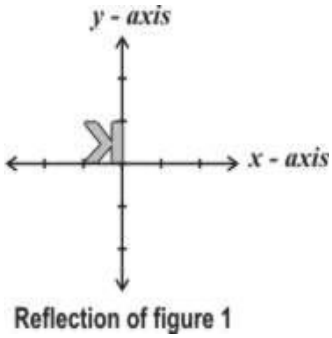
Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
9	5_27 Mathematics 8438	Coordinate Geometry	A lamp post has to be fixed right at the centre of the rectangular lawn shown in the figure.At what distance from a corner should the lamp post be fixed?		A

Answer Options			
Option A	Option B	Option C	Option D
25m	35m	50m	70m

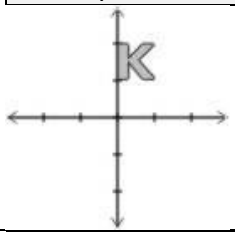
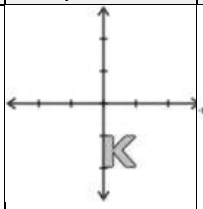
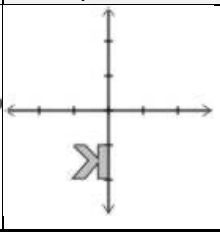
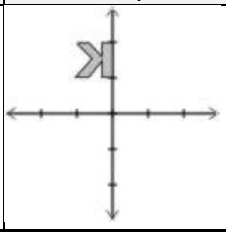
Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
10	5_28 Mathematics 10107	Coordinate Geometry	A plane figure can be 'transformed' in different ways. Study the transformations described below and answer the question. A 'translation' slides all the points in a plane figure through the same distance in the same direction. Let horizontal translation be given by 'h' and vertical by 'v'. Consider Figure 1 as the original figure, with h = 0, v = 0.What are the h and v values for the following figure, taking Figure 1 as the reference?		B

Answer Options

Option A	Option B	Option C	Option D
h = -1, v = -1	h = -1, v = 0	h = 0, v = -1	h = 2, v = -1

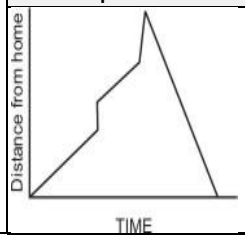
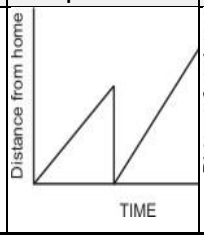
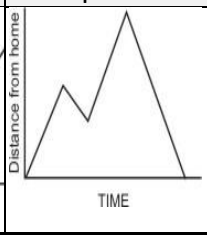
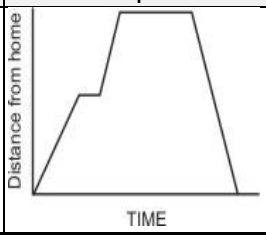
Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
11	5_28 Mathematics 10108	Coordinate Geometry	A plane figure can be 'transformed' in different ways. Study the transformations described below and answer the question. A 'translation' slides all the points in a plane figure through the same distance in the same direction. Let horizontal translation be given by 'h' and vertical by 'v'. Consider Figure 1 as the original figure, with h = 0, v = 0.A 'reflection' flips all the points of a plane over a line, called the 'mirror'. If Figure 1 is reflected using the y-axis as the mirror, it will look like this: If Figure 1 were to be translated to the position h = 0, v = 1, and then reflected using the y-axis as the mirror, what would be the resultant position?		D   Reflection of figure 1

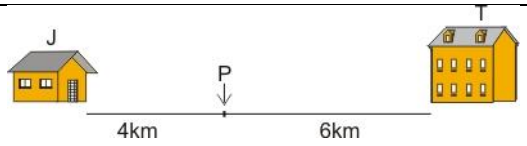
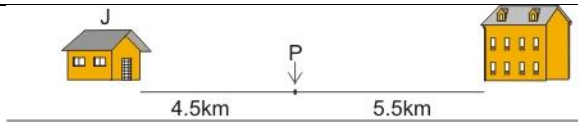
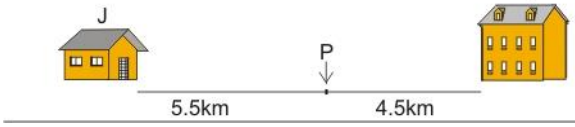
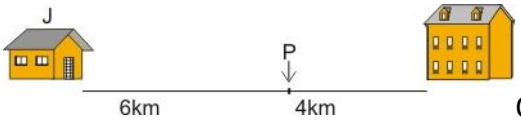
Answer Options

Option A	Option B	Option C	Option D
			

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
12	5_29 Mathematics 11781	Coordinate Geometry	Mrs. Singh and her son start from home in their car. She is on her way to the supermarket. On the way, she stops to drop her son at his drawing class. She drives on to the supermarket, spends some time shopping there and then drives back home. Which of the graphs below correctly describes Mrs. Singh's journey?		D

Answer Options

Option A	Option B	Option C	Option D
			

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
13	3_19 Mathematics 2794	Linear equations in two variables	Jamal's house (J) and Tarang's house (T) are 10 km apart on a straight road. One day, both of them started from their houses at the same moment and met on the road after half an hour. If Jamal walked 2 km/hr faster than Tarang, which diagram correctly shows the position of their meeting point, P? Answer Options  OPTION A  OPTION B  OPTION C  OPTION D		C

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
14	5_26 Mathematics 1628	Linear Equations In Two Variables	A cake is cut into 3 pieces whose weights are in the ratio 2:1:4.If the third piece weighs 360 g more than the second, how much did the whole cake weigh?		C

Answer Options			
Option A	Option B	Option C	Option D
1.44 kg	1.26 kg	840 g	630 g

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
15	5_26 Mathematics 1642	Linear Equations In Two Variables	If 1/x = 2/y-2 then y is equal to		D

Answer Options

Option A	Option B	Option C	Option D
2/(x + 2)	2/2(x + 2)	(x + 2)/2	2x + 2

Question Paper

Set 2

Subject : Maths
Grade: IX

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
1	5_26 Mathematics 1649	Linear Equations In Two Variables	If $x + 1/x = 3$, what would the value of $x^2 + 1/x^2$ be?		C

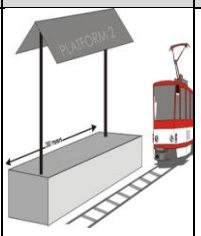
Answer Options			
Option A	Option B	Option C	Option D
18	9	7	6

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
2	5_26 Mathematics 1653	Linear Equations In Two Variables	There are only 1-rupee and 2-rupee coins in a bag. The total value of the 1-rupee coins is the same as the total value of the 2-rupee coins. If the bag has x coins in all, what is their total value (in Rs.)?		B

Answer Options			
Option A	Option B	Option C	Option D
3x	4x/3	3x/4	3x/2

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
3	5_26 Mathematics 1654	Linear Equations In Two Variables	A 3 kg bag of rice lasts exactly 30 days for Mrs. and Mr. Pestonjee when both consume equal amounts. If Mr. Pestonjee cuts down his rice intake by half on his doctor's advice, how many days would a 3 kg bag last them?		B

Answer Options			
Option A	Option B	Option C	Option D
35	40	42	45

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
4	5_26 Mathematics 1655	Linear Equations In Two Variables	A 200 metre long train running at a speed of 10 metre/second starts passing by a 200 metre long platform at exactly 11:00:10. See the adjoining images.What would be the time when the entire train just finishes crossing the platform?		D

Answer Options

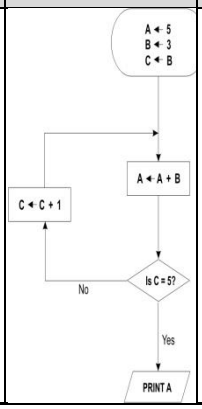
Option A	Option B	Option C	Option D
11:00:20	11:00:30	11:00:44	11:00:50

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
5	5_27 Mathematics 8448	Linear Equations In Two Variables	A shopkeeper decreases the selling price of a ceiling fan by 10% at the start of winter. When winter is over, he decides to raise the price back to the original selling price. By what percent would he need to increase the lowered price in order to do this?		B

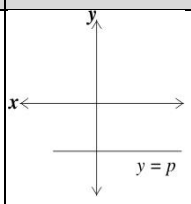
Answer Options			
Option A	Option B	Option C	Option D
20%	11.11%	10%	9.99%

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
6	5_27 Mathematics 8449	Linear Equations In Two Variables	Sohail's autumn break lasted x days. Of these, he was out of station for 8 days. For the remaining days, his mother promised him Rs. 10 per day to clean up the whole house. At the end of the break, she was so happy with his work, that she decided to square the amount due to him. What is the amount that Sohail got?		D

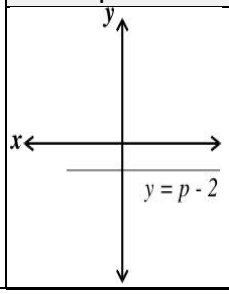
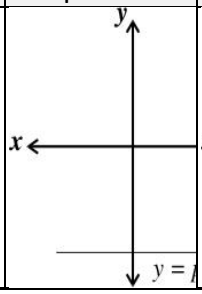
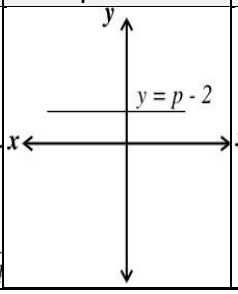
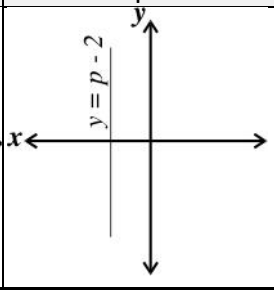
Answer Options			
Option A	Option B	Option C	Option D
Rs. $(100x^2 - 8)$	Rs. $[10+x - 8)]^2$	Rs. $10(x - 8)^2$	Rs. $100(x - 8)^2$

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
7	5_27 Mathematics 8456	Linear Equations In Two Variables	What value of A will be printed if flowchart shown in the image , is executed?(A← 5 means that the value of A is set to 5)		C

Answer Options			
Option A	Option B	Option C	Option D
8	12	10	17

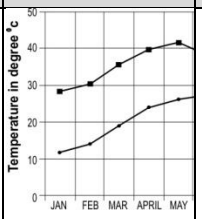
Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
8	5_27 Mathematics 8462	Linear Equations In Two Variables	The graph of y = p is shown in the adjoining image. Which of the following depicts the graph of y = p - 2?		B

Answer Options

Option A	Option B	Option C	Option D
			

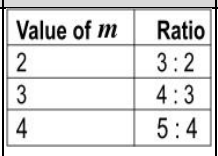
Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
9	5_27 Mathematics 8437	Linear Equations In Two Variables	Mrs. Nair opts for a mobile phone offer that charges a monthly fee of Rs. 250 plus a charge of Rs. 1.25 per minute for local calls.She fixes a budget of Rs. 400 per month for her mobile phone bill. At most how many minutes can she use the phone (local) each month while staying within her budget		C

Answer Options			
Option A	Option B	Option C	Option D
100	110	120	150

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
10	5_27 Mathematics 8442	Linear Equations In Two Variables	The graph in the adjoining image shows the average maximum and minimum monthly temperatures in Ahmedabad in a year.In which of the following periods did the average maximum temperature record a steady fall?		D

Answer Options

Option A	Option B	Option C	Option D
July to Sep	Sep to Nov	Feb to Apr	May to July

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
11	5_27 Mathematics 8443	Linear Equations In Two Variables	The ratio of the sum of the first m even natural numbers to that of the first m odd numbers is given in the table. According to this, the ratio of the sum of the first m even numbers and that of the first m odd numbers is given by the expression		D

Value of m	Ratio
2	3 : 2
3	4 : 3
4	5 : 4

Answer Options

Option A	Option B	Option C	Option D
$\frac{m}{m-1}$	$\frac{3m}{2}$	$\frac{m}{m+1}$	$\frac{m+1}{m}$

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
12	5_27 Mathematics 8444	Linear Equations In Two Variables	While doing her Physics homework, Archana has to use the formula $1/R = 1/R_1 + 1/R_2$. How could she rewrite this formula to get the correct value of R_2 when R and R_1 are given?		D

Answer Options			
Option A	Option B	Option C	Option D
$R_2 = R - R_1$	$R_2 = 1/(R-R_1)$	$R_2 = (R-R_1-RR_1)$	$R_2 = RR_1/(R_1-R)$

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
13	5_28 Mathematics 10099	Linear Equations In Two Variables	A painter is able to paint a flat in 8 days. How many days would it have taken to paint the flat if he had two more painters working with him - one working at the same speed as him, and another working at double that speed ?		D

			Answer Options			
			Option A	Option B	Option C	Option D
			11	5	4	2

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
14	5_28 Mathematics 10101	Linear Equations In Two Variables	The ratio of the height of two plants X and Y is 2:1. If plant X grows at the rate of 2 metres per year, at what rate should plant Y grow so that after 4 years they are of the same height?		D

			Answer Options			
			Option A	Option B	Option C	Option D
			1.5 metres per year	2.25 metres per year	2.5 metres per year	It will vary depending on the height of Y.

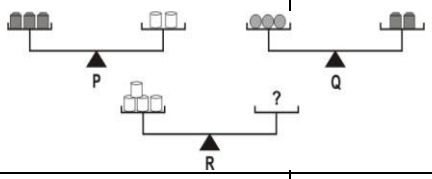
Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
15	5_28 Mathematics 10103	Linear Equations In Two Variables	The light signals at a traffic crossing (in a particular direction) were timed in such a way that the traffic had the 'STOP' signal for s seconds and the 'GO' signal for g seconds. Rajat stopped at the signal when the light		C

had just turned RED. Due to heavy traffic at the crossing, he misses the green signal twice and starts exactly when the light turns GREEN the third time. For how many seconds was he at the crossing?

Answer Options			
Option A	Option B	Option C	Option D
2s + g	2(s + g)	3s + 2g	3(s + g)

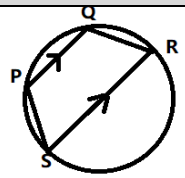
Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
1	3_19 Mathematics 2781	Linear Equations in two variables	In which of the following equations will the value of y decrease as the value of x increases?		C
		Answer Options			
		Option A: y = x-1	Option B: y = 2x-15	Option C: y = 5-2x	Option D: $y = \frac{x}{3}$
2	3_19 Mathematics 2793	Linear Equations in two variables	One man takes one day to dig a 4 m long trench. How long would it take 2 men working at the same rate to dig a 16 m long trench?		B
		Answer Options			
		Option A: 1 day	Option B: 2 days	Option C: 4 days	Option D: 8 days
3	3_19 Mathematics 2795	Linear equations in two variables	Akbar, Ali and Arman are 3 brothers. The ratio of Akbar's age to Arman's age is 1 : 2 and the ratio of Akbar's age to Ali's age is 2 : 5. If the eldest boy is 10 years old, how old is the youngest one?		C
		Answer Options			
		Option A: 1 year	Option B: 2years	Option C: 4 years	Option D: 5 years

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
4	3_19 Mathematics 2806	Linear equations	Suparna has saved up Rs. 538 for a new pair of jeans. The price of the pair she wants is Rs. 750. Suparna's mother tells her that she can earn Rs. 15 per hour by helping her with the housework. Which of the following will help Suparna figure out how many hours (x) of housework she needs to do before she has enough to buy the jeans?		A
		Answer Options			
		Option A: 538+15x=750	Option B: 15x=750	Option C: 750-538x=15	Option D: (538+15)x=750
5	3_19 Mathematics 2800	Linear equation in two variables	This is a sale notice that Mr. Rai has put up in his shop to attract customers. However, not really intending to sell his goods at a low price, he has marked each item at 10% higher than the actual marked price before announcing the sale. At what price would he be selling an item whose original marked price was P?		D
		Answer Options			
		Option A: P	Option B: 10%of P	Option C: 90%of P	Option D: 99% of P
6	3_19 Mathematics	Linear equation	I started two clocks at the same time. One runs slow and loses 1 minute every hour. The other one is fast and gains 3 minutes every hour. How long will it take for the faster clock to be exactly one hour ahead of the slower		C

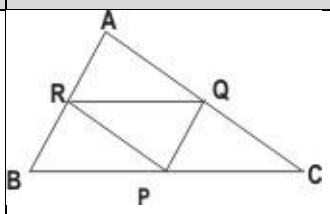
	2796		clock?			
		Option A	Option B	Option C	Option D	
		1 day	18 hours	15 hours	12 hours	
Q. N	Folder name & Question Code	Topic	Question with Answer Options		Image (If Any)	Correct Answer (Option-A,B,C,D)
7	3_19 Mathematics 2807	Linear equations	In the weighing scales shown below, the same shapes represent the same weights. According to the balanced scales P and Q, what weights should be put on the pan on the right to balance scale R?			B
		Answer Options				
		Option A	Option B	Option C	Option D	
		A.	B.	C.	D.	
Q. N	Folder name & Question Code	Topic	Question with Answer Options		Image (If Any)	Correct Answer (Option-A,B,C,D)
9	2_11 Mathematics 4464	Linear equations	P, Q and R are three friends. Q's height is 5/6 times the height of P. R's height is 1/5 times that of Q. Which of these statements is true?			A
		Answer Options				
		Option A	Option B	Option C	Option D	
		The ratio of P's height to that of Q is 6 : 5.	P is shorter than Q	Q is shorter than R	P and R are of the same height	

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
10	252&11415	INTRODUCTION TO EUCLID'S GEOMETRY	Points P, Q and R are co-planar. In which of the following cases will they NECESSARILY be collinear?		C

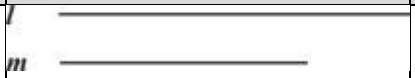
Answer Options			
Option A	Option B	Option C	Option D
When PQ = PR	When PQ + PR > QR	When PQ + QR = PR	When PR < PQ + QR

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
11	251&11414	LINES AND ANGLES	For a quadrilateral PQRS inscribed in a circle, with PQ || RS, which of the following is NOT necessarily true?		A

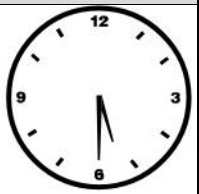
Answer Options			
Option A	Option B	Option C	Option D
$\angle Q + \angle P = 180^0$	$\angle Q + \angle S = 180^0$	$\angle Q + \angle R = 180^0$	$\angle S + \angle P = 180^0$

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
12	255&11418	LINES AND ANGLES	In the following figure PR || AC, QP || AB and RQ || BCIf the perimeter of triangleABC is 24 cm, the perimeter of triangle PQR will be		C

Answer Options			
Option A	Option B	Option C	Option D
6 cm	8 cm	12 cm	16 cm

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
13	260&11425	LINES AND ANGLES	If the length of the longer line is 60 cm, the length of the shorter one is		B

Answer Options			
Option A	Option B	Option C	Option D
25 cm	22.5 cm	20 cm	18 cm

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
14	8459	LINES AND ANGLES	The clocks below show the date and time in two different places in the world at the same, who stays in Mumbai, wants to chat with a friend who stays in Los Angeles on the internet. Everyday, George is on the internet from 9 a.m. to 8 p.m. (Mumbai time) and his friend is on the internet from 6 a.m. to 7 p.m. (Los Angeles time). According to the local time in Mumbai, what would be a suitable time for them to chat?	 Mumbai 5.30 a.m. (13	C

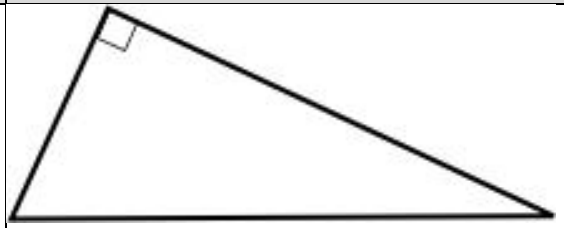
Answer Options			
Option A	Option B	Option C	Option D
9.00 a.m. to 9.30 a.m	6.00 p.m. to 7.00 p.m.	7.30 p.m. to 8.00 p.m.	9.00 a.m. to 7.00 p.m.

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
15	8423	LINES AND ANGLES	The difference between two temperature readings in an experiment was 9^0Which of these could be the temperature readings?		B

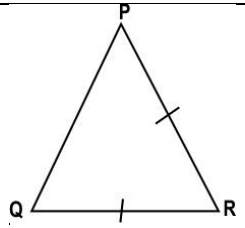
Answer Options			
Option A	Option B	Option C	Option D
1 and -6^0	$-5^0$and 4^0	$-1^0$and 9^0	$-2^0$and 11^0

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
1	8446	LINES AND ANGLES	What is the smaller angle between the hour and the minute hand of a clock at 12:20?		B

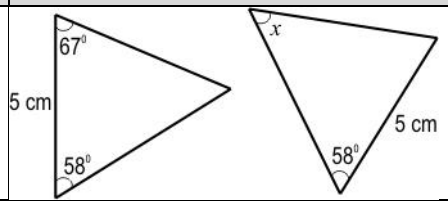
Answer Options			
Option A	Option B	Option C	Option D
105^0	110^0	115^0	120^0

S.N	Folder Number & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
2	**2_10 Mathematics**	TRIANGLES	Which of the following could represent the lengths of the sides of the triangle shown below?		**C**
	5891				

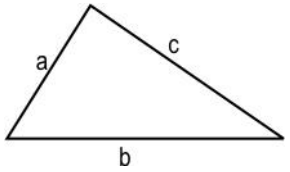
Answer Options			
Option A	Option B	Option C	Option D
6 units, 8 units, 12 units	4 units, 6 units, 5 units	15 units, 9 units, 12 units	10 units, 8 units, 4 units

S.N	Folder Number & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
3	**2_10 Mathematics**	TRIANGLES	The triangle here has side RP equal to side QR. The drawing shown is not to scale. Which angle of the triangle CAN have a degree measure of 95^0?		**C**
	5898				

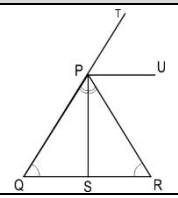
Answer Options			
Option A	Option B	Option C	Option D
$\angle P$	$\angle Q$	$\angle R$	None of them

S.N	Folder Number & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
4	2_10 Mathematics 5907	TRIANGLES	Shown here are two CONGRUENT scalene triangles. Some of the measurements are given. What is the measure of the angle marked x?		A

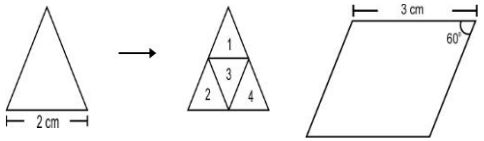
Answer Options			
Option A	Option B	Option C	Option D
55^0	58^0	67^0	65^0

S.N	Folder Number & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
5	2_10 Mathematics 5910	TRIANGLES	The semi perimeter of a triangle is half of the perimeter. For the triangle below the semi-perimeter is (a + b + c)/2. What is the ratio of the side of an equilateral triangle to its semi-perimeter?		C

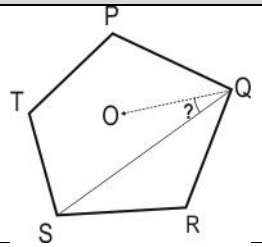
Answer Options			
Option A	Option B	Option C	Option D
01:02	01:03	02:03	01:06

S.N	Folder Number & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
6	2_10 Mathematics 5911	TRIANGLES	In an isosceles triangle PQR with PQ = PR, PS is the bisector of angle QPR. QP is extended to T and PU is drawn parallel to QR. From this, which of the following CANNOT be concluded?		D

Answer Options			
Option A	Option B	Option C	Option D
PS is perpendicular to QR.	PU is the bisector of angle TPR.	PS is a median of the triangle.	PR is the bisector of angle UPS.

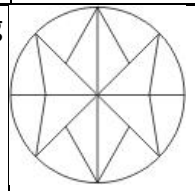
S.N	Folder Number & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
7	2_10 Mathematics 5916	TRIANGLES	4 equilateral triangles of side 1 cm are required to tile the triangle shown How many equilateral triangles of side 1cm will be required to cover the rhombus shown?		B

Answer Options			
Option A	Option B	Option C	Option D
9	18	24	36

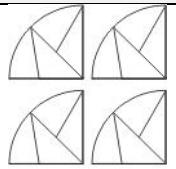
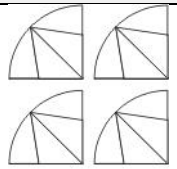
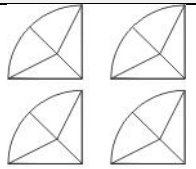
S.N	Folder Number & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
8	3_18 Mathematics 3416	TRIANGLES	PQRST is a regular pentagon and O is its centre. What is the measure of OQS?		A

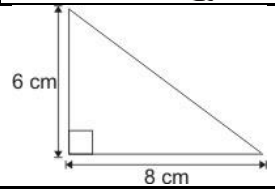
Answer Options

Option A	Option B	Option C	Option D
18^0	22.5^0	36^0	54^0

S.N	Folder Number & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
9	3_18 Mathematics 3418	TRIANGLES	The design given below is made by putting 4 tiles together. (The underside of the tiles are plain) Which set of tiles is the design made of?		D

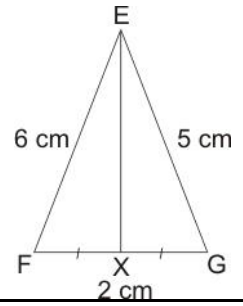
Answer Options

Option A	Option B	Option C	Option D
 **A.**	 **B.**	 **C.**	None of these

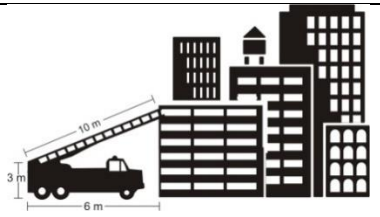
S.N	Folder Number & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
10	3_18 Mathematics 3393	TRIANGLES	What is the perimeter of the triangle shown below?		B

Answer Options

Option A	Option B	Option C	Option D
14 centimetres	24 centimetres	28 centimetres	We can't say

S.N	Folder Number & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
11	3_19 Mathematics 2784	TRIANGLES	A triangle EFG has sides 6 cm, 5 cm and 2 cm. The median EX is drawn as shown. (The figure shown is not to scale.) Which of the following could be the length of EX?		B

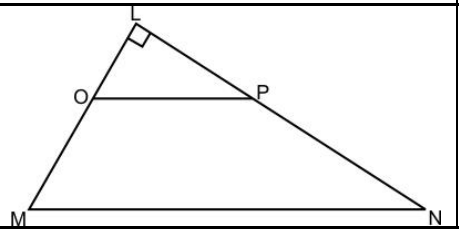
Answer Options			
Option A	Option B	Option C	Option D
6.1 cm	5.4 cm	5 cm	4.8 cm

12	3_19 Mathematics 2801	TRIANGLES	A fire engine, standing near a building, extends its ladder to a length of 10 metres to reach a certain window in the building. What is the height of the window from the ground?		D

Answer Options			
Option A	Option B	Option C	Option D
6 m	8 m	9 m	11 m

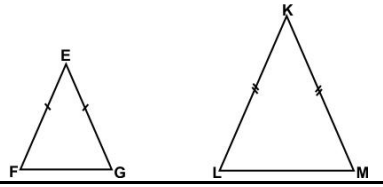
13	2_11 Mathematics 5312	TRIANGLES	(a, b, c) is known as a Pythagorean triplet if $a^2 + b^2 = c^2$. If (a, b, c) is a Pythagorean triplet, which of the following must also be a Pythagorean triplet?		D

Answer Options			
Option A	Option B	Option C	Option D
(a^2, b^2, c^2)	(3a, 4b, 5c)	(a + 2, b + 2, c + 2)	(7a, 7b, 7c)

S.N	Folder Number & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
14	2_11 Mathematics 5318	TRIANGLES	In the figure, OP is parallel to base MN of right angled triangle LMN. Also, LO = 3 cm, OM = 6 cm and MN = 15 cm. What is the perimeter (in cm) of trapezium OPNM?		C

Answer Options

Option A	Option B	Option C	Option D
30	32	34	42

S.N	Folder Number & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
15	2_11 Mathematics 5319	TRIANGLES	Shown below are two isosceles triangles with the equal sides marked: Which set of conditions given below is SUFFICIENT for the two triangles to be congruent?		C

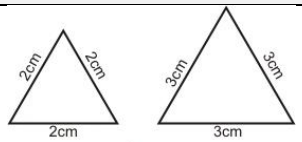
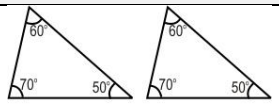
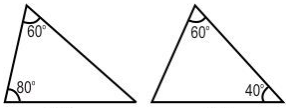
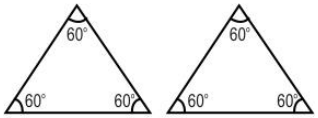
Answer Options

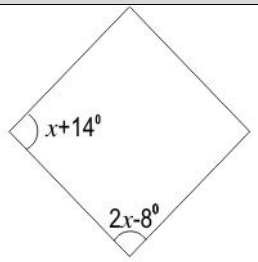
Option A	Option B	Option C	Option D
$\angle E = \angle K$ and $\angle F = \angle L$	EF = KL and EG = KM	FG = LM and $\angle E = \angle K$	$\angle E = \angle K = 90^0$

Set:13 MATHS-IX

1	**2_11 Mathematics 4472**	TRIANGLES	In which case will the pair of triangles DEFINITELY be congruent? (Figures not to scale - consider only measures given)		**C**

Answer Options

Option A	Option B	Option C	Option D
 **A.**	 **B.**	 **C.**	 **D.**

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	CorrectAnswer (Option-A,B,C,D)
2	5_27 8424	Quadrilaterals	What is the measure of the smaller angle in the rhombus shown in the image?	 (**Note:** Figure is NOT to scale)	B

Answer Options			
Option A	Option B	Option C	Option D
108^0	72^0	58^0	22^0

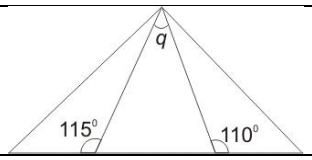
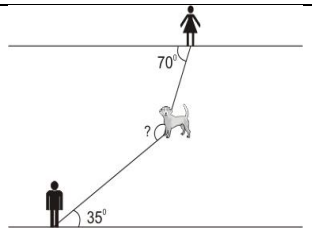
Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	CorrectAnswer (Option-A,B,C,D)
3	5_27 8432	Quadrilaterals	If four shapes - a square, a rectangle, a triangle and a circle - have the same area, which of them will have the smallest perimeter?		D

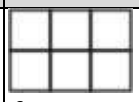
Answer Options			
Option A	Option B	Option C	Option D
the triangle	the square	the rectangle	the circle

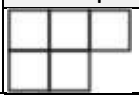
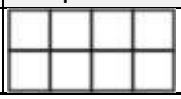
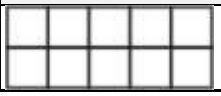
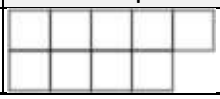
<table>
<tr><th>Q. N</th><th>Folder name & Question Code</th><th>Topic</th><th>Question with Answer Options</th><th>Image (If Any)</th><th>Correct Answer (Option-A,B,C,D)</th></tr>
<tr><td rowspan="3">4</td><td rowspan="3">2_11
MATHEMATICS
5307</td><td>Quadrilaterals</td><td>MNOP is a quadrilateral with∠M: ∠N: ∠O: ∠P=2:2:1:1 and MN and OP ae opposite sides ,what kind of quadrilateral is MNOP</td><td></td><td>C</td></tr>
<tr><td colspan="4">Answer Options</td><td rowspan="2"></td></tr>
<tr><td colspan="4"><table>
<tr><th>Option A</th><th>Option B</th><th>Option C</th><th>Option D</th></tr>
<tr><td>A rectangle</td><td>A rhombus</td><td>A trapezium</td><td>A parallelogram</td></tr>
</table></td></tr>
</table>

5	3_18 Mathematics 3394	QUADRILATERALS	In quadrilateral ABCD, $\angle A + \angle B = \angle C + \angle D = 180°. But \angle A \neq \angle C. Quadrilateral\ ABCD\ must\ be\ a$		D
		Answer Options			
		Option A	Option B	Option C	Option D
		Rectangle	Parallelogram	Rhombus	Trapezium

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
6	3_18 Mathematics 3405	QUADRILATERALS	A square is cut in half to form two equal rectangles. If each of the two resulting rectangles has a perimeter of p cm, what was the perimeter (in cm) of the original square?		D
		Answer Options			
		Option A	Option B	Option C	Option D
		2p	$\frac{2}{3}p$	3p	$\frac{4}{3}p$

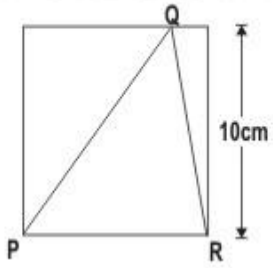
7	3__19 Mathematics 2792	QUADRILATERALS	What is the measure of the angle marked 'q' in the figure?		A
		Answer Options			
		Option A	Option B	Option C	Option D
		45°	65°	67.5°	70°
8	3__19 Mathematics 2805	QUADRILATERALS	Leslie and Surekha were standing on opposite sides of a road. Suddenly, they spotted a puppy stranded on the road and both rushed straight to where the puppy was, to pick it up. If Leslie ran at an angle of 35^0 to the edge of the road and Surekha at an angle of 70^o at what angle did their paths meet?		D
		Answer Options			
		Option A	Option B	Option C	Option D
		75^0	105^0	135^0	145^0

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
9	5_28 10073	Areas of Parallelograms and Triangles	 If represents 75%,which of the following represents125%		C

Answer Options			
Option A	Option B	Option C	Option D
			

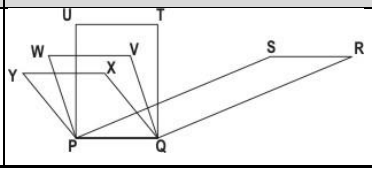
Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
10	5_28 10082	Areas of Parallelograms and Triangles	For a right-angled isosceles triangle , the ratio of the length of hypotenuse to the length of any of its smaller side		A

Answer Options			
Option A	Option B	Option C	Option D
Is always fixed and equal to √2 :1	Is always fixed and equal to 1:1	Is always fixed and equal to 2:1	Varies with the change in the length of its other sides.

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
11	5_28 10085	Areas of Parallelograms and Triangles	**A square of side 10 cm has a triangle inscribed in it as shown. What is the area of triangle PQR?**  		B

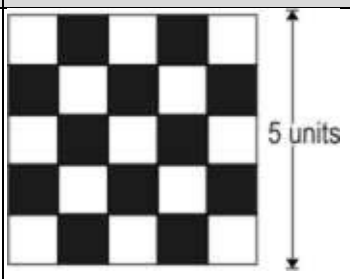
Answer Options

Option A	Option B	Option C	Option D
$45\ cm^2$	$50\ cm^2$	$25\sqrt{3}\ cm^2$	Can't say without knowing the position of Q.

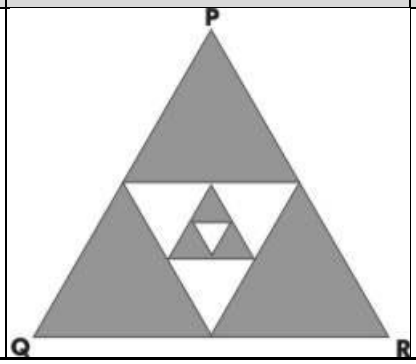
Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
12	5_29 11780	Areas of Parallelograms and Triangles	Which two parallelograms are equal in area?		D

Answer Options

Option A	Option B	Option C	Option D
PQRS and PQXY	PQRS and PQVW	PQTU and PQVW	Cannot be decided

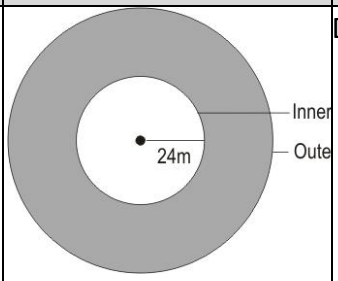
Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
13	5_28 10106	Areas of Parallelograms and Triangles	If all the white squares that touch the border of the board below are cut out, what will happen to the perimeter of the remaining piece as compared to that of the original board?		B

Answer Options			
Option A	Option B	Option C	Option D
it will increase by 16 units	it will increase by 8 units	it will decrease by 8 units	it will remain the same

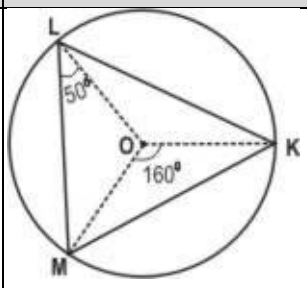
Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
15	5_28 10109	Areas of Parallelograms and Triangles	In the pattern below, each smaller triangle is formed by joining the midpoints of the triangle immediately larger than it. What part of triangle PQR is shaded?		D

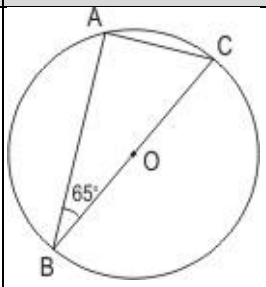
Answer Options			
Option A	Option B	Option C	Option D
3/5	13/16	49/64	51/64

SET-14 MATHS-IX

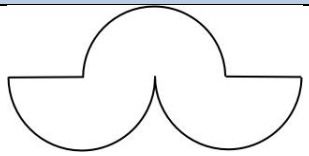
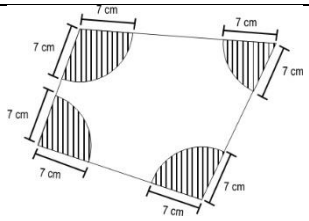
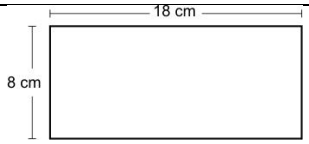
Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option - A,B,C,D)
1	5_26 1643	Circles	Keeping his speed the same, John takes 1.5 times as much time to jog once along the outer edge of the circular track shown here as compared to the inner edge. What is the width of the track if the radius of the inner edge is 24 m?		D

Answer Options			
Option A	Option B	Option C	Option D
36m	24 m	15 m	12 m

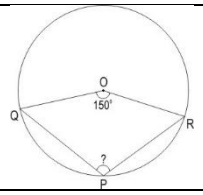
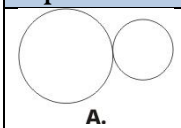
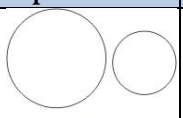
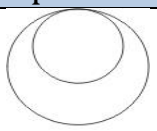
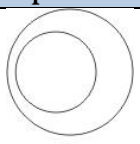
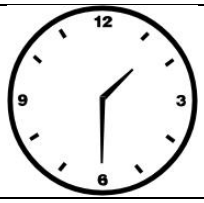
Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
2	5_28 10098	Circles	Triangle KLM is inscribed in the circle with centre O. If m∠OLM = 50°and m∠KOM = 160°,what is the measure of∠LKO?		B

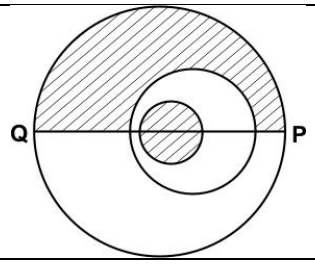
Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
3	5_29 11416	Circles	O is the centre of the circle shown here Note: The figure is not to scale. What is ∠BCA?		C

Answer Options			
Option A	Option B	Option C	Option D
65°	35°	25°	115°

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
5	2_10 Mathematics 5913	CIRCLES	Swati cuts out three SEMI-CIRCULAR pieces of radius 5 cm from a large sheet of paper. She then sticks them on a piece of cardboard to form the design shown below in such a way that there is no overlap: What is the perimeter of the shape (in cm)?		C
		Answer Options			
		Option A	Option B	Option C	Option D
		15π	30π	15π+10	30π+10
6	2_10 Mathematics 5918	CIRCLES	The area of the shaded part of the quadrilateral is		C
		Answer Options			
		Option A	Option B	Option C	Option D
		77 cm^2	98 cm^2	154 cm^2	(Cannot say)
7	2_10 Mathematics 5920	CIRCLES	The largest SEMICIRCLE that can be cut out of the rectangle shown here will have a radius of		B
		Answer Options			
		Option A	Option B	Option C	Option D
		4 cm	8 cm	9 cm	10 cm

Q.	Folder	Topic	Question with Answer	Image (If Any)	Correct

N	name & Question Code		Options			Answer (Option-A,B,C,D)
8	3_18 Mathematics 3421	CIRCLES	At what time between 9 o'clock and 10 o'clock does the minute hand of a clock overtake the hour hand?			C
		Answer Options				
		Option A	Option B	Option C	Option D	
		at 9:30	between 9:46 and 9:48	between 9:48 and 9:50	between 9:50 and 9:52	
9	3_18 Mathematics 3391	CIRCLES	O is the centre of the circle shown below.What is the measure of ∠QPR ?			B
		Answer Options				
		Option A	Option B	Option C	Option D	
		30°	105°	210°	150°	
10	3_18 Mathematics 3409	CIRCLES	Two circles have radii x cm and y cm respectively (x not equal to y) and the distance between their centres is d cm. If x - y = d, what will be the relative position of the two circles?			C
		Answer Options				
		Option A	Option B	Option C	Option D	
		 A.	 B.	 C.	 D.	
11	2_11 Mathematics 5331	CIRCLES	What would be the time shown by this clock after the HOUR hand has turned by 8°?			C
		Answer Options				
		Option A	Option B	Option C	Option D	
		1:31	1:38	1:46	2:52	

13	2_11 Mathematics 5322	CIRCLES	In the figure, QP is a diameter of the outermost circle and the centres of the other two circles also lie on QP. The radii of the three circles are in the ratio 4 : 2 : 1. What fraction of the outermost circle is shaded?		D

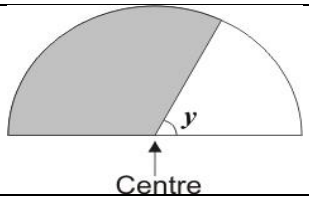
Answer Options

Option A	Option B	Option C	Option D
$\frac{1}{2}$	$\frac{3}{7}$	$\frac{4}{11}$	$\frac{7}{16}$

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
14	3__19 Mathematics 2783	CIRCLES	Sania drew a quadrilateral PQRS in which the opposite angles were supplementary but the adjacent angles were not. What kind of quadrilateral was PQRS?		D

Answer Options

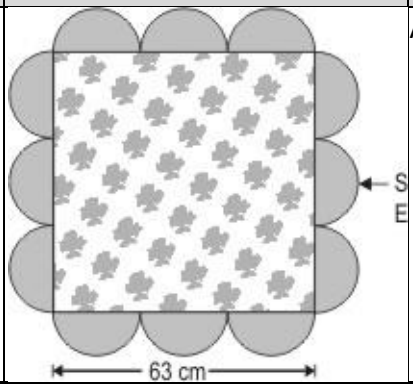
Option A	Option B	Option C	Option D
A trapezium	A rhombus	A parallelogram	A cyclic quadrilateral

15	3__19 Mathematics 2776	CIRCLES	What will be the measure of angle y if 65% of the semi circular region is shaded?		B

Answer Options

Option A	Option B	Option C	Option D
60°	63°	65°	75°

SET-15 MATHS-IX

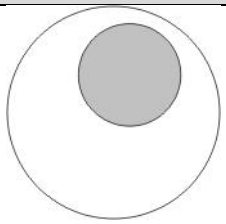
Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
1	5_29 11419	Circles	Sunidhi's mother made a square table cloth with scalloped edges made of equal semi-circles as shown: If she wants to fix lace all along the scalloped edges, about how many metres of lace would she need?		A

Answer Options			
Option A	Option B	Option C	Option D
4	6	8	12

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
2	3__19 Mathematics 2783	CIRCLES	Sania drew a quadrilateral PQRS in which the opposite angles were supplementary but the adjacent angles were not. What kind of quadrilateral was PQRS?		D

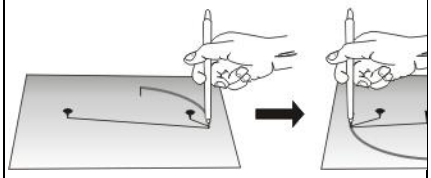
Answer Options

Option A	Option B	Option C	Option D
A trapezium	A rhombus	A parallelogram	A cyclic quadrilateral

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
6	3_19 Mathematics 2780	Circles	Two circular sheets have diameters in the ratio 1:2. If the smaller circular sheet is put on top of the larger one as shown, what part of the larger circular sheet remains uncovered?		B

Answer Options

Option A	Option B	Option C	Option D
1/4	3/4	2/4	4/4

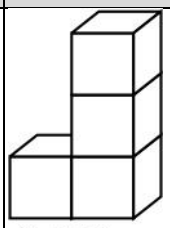
Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	CorrectAnswer (Option-A,B,C,D)
7	5_26 1661	constructions	An 'ellipse' is a closed curve drawn in this way: Fix two points (focuses or foci) and move a pencil along the end of a closed string as shown in the figure:From this, we can say that an ellipse is the curve traced by a point moving in such a way that		C

Answer Options

Option A	Option B	Option C	Option D
its distance from a fixed point remains the same.	its distance from 2 fixed points remains the same.	the sum of its distances from 2 fixed points remains the same.	the difference of its distances from 2 fixed points remains the same.

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	CorrectAnswer (Option-A,B,C,D)
9	5_27 8428	Herons Formula	A gardener can trim a square lawn of side 50 metres in 4 hours. At the same rate, how long will it take him to trim a square lawn of side 25 metres?		A

Answer Options			
Option A	Option B	Option C	Option D
1 hour	2 hours	2 hours 30 minutes	3 hours

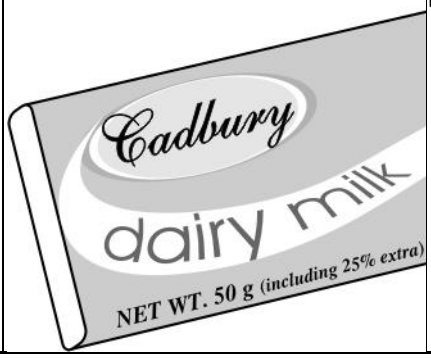
Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	CorrectAnswer (Option-A,B,C,D)
10	5_27 8452	Surface Areas and volumes	Solid X is made by putting together 4 unit cubes.If the total surface area of solid X is 36 cm^2, what is the total surface area of each unit cube?	 Solid X	A

Answer Options			
Option A	Option B	Option C	Option D
12cm^2	10 cm^2	9 cm^2	6 cm^2

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	CorrectAnswer (Option-A,B,C,D)
11	5_27 8455	Surface Areas and volumes	A rectangular metal sheet 16 dm x 20 dm has to be rolled to form a cylinder. What is the maximum volume (in cubic decimetres) that it can enclose when the base is attached?		B

Answer Options

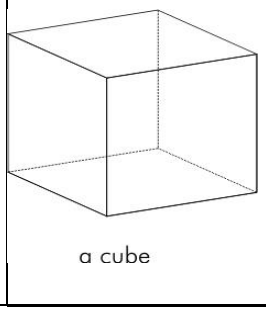
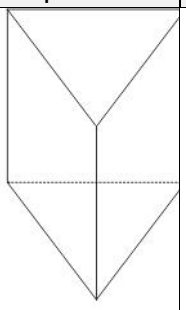
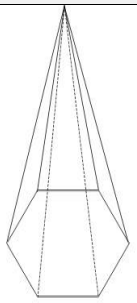
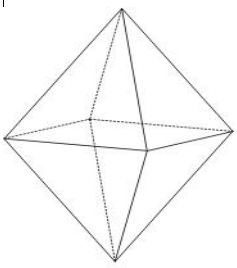
Option A	Option B	Option C	Option D
$\frac{1280}{\pi}$	$\frac{1600}{\pi}$	$\frac{5120}{\pi}$	$\frac{6400}{\pi}$

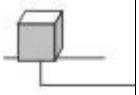
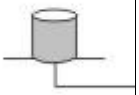
Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	CorrectAnswer (Option-A,B,C,D)
12	5_27 8429	Surface Areas and volumes	Look at this chocolate wrapper shown in the Image .Normally, how many grams of this chocolate would you have got for Rs. 16?		B

Answer Options			
Option A	Option B	Option C	Option D
62.5	40	37.5	35

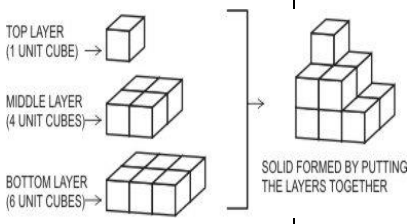
Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	CorrectAnswer (Option-A,B,C,D)
13	5_27 8434	Surface Areas and volumes	Sarthak gave the description of a three-dimensional figure as follows: It has 6 vertices. It has 12 edges. It has 8 faces. Which of the following figures is it?		D

Answer Options

Option A	Option B	Option C	Option D
 a cube	 a triangular pris	 a pyramid with hexagonal bas	 an octahedron

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	CorrectAnswer (Option-A,B,C,D)
14	5_27 8447	Surface Areas and volumes	In the following figures, ider   According to these relations, weights of , and		A

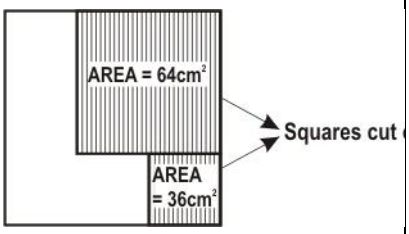
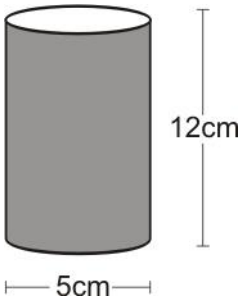
Answer Options			
Option A	Option B	Option C	Option D
3:1:6	2:6:1	3:1:2	1:6:1

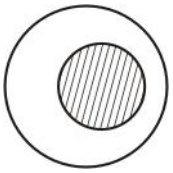
<table>
<tr><th>Q. N</th><th>Folder name & Question Code</th><th>Topic</th><th>Question with Answer Options</th><th>Image (If Any)</th><th>Correct Answer (Option-A,B,C,D)</th></tr>
<tr><td>15</td><td>2_11
MATHEMATICS
4466</td><td>Surface area and volume</td><td>11 small unit cubes are joined together as shown below to form the solid shown in Figure At least how many more unit cubes will be needed to turn the structure into a solid CUBE (not cuboid) with no gaps?</td><td> 
</td><td>D</td></tr>
<tr><td></td><td></td><td colspan="3">Answer Options
<table><tr><th>Option A</th><th>Option B</th><th>Option C</th><th>Option D</th></tr><tr><td>3</td><td>8</td><td>11</td><td>16</td></tr></table></td><td></td></tr>
</table>

Subject: Mathematics

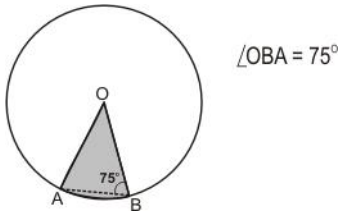
Grade: 9th

SET- 16

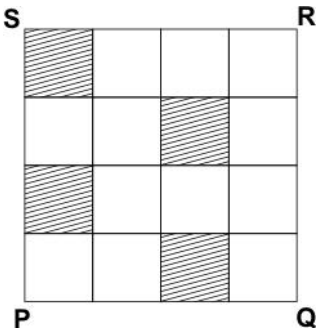
<table>
<tr><th>S. N</th><th>Folder name & Question Code</th><th>Topic</th><th>Question with Answer Options</th><th>Image (If Any)</th><th>Correct Answer (Option-A,B,C,D)</th></tr>
<tr><td>1.</td><td>2_11 Mathematics 4483</td><td>MENSURATION</td><td>Two squares of area 64 sq cm and 36 sq cm are cut off from a larger square sheet as shown in the figure:
What is the PERIMETER of the remaining part of the sheet?</td><td> 
</td><td>C</td></tr>
<tr><td colspan="5">
<table>
<tr><th colspan="4">Answer Options</th></tr>
<tr><th>Option A</th><th>Option B</th><th>Option C</th><th>Option D</th></tr>
<tr><td>32 cm</td><td>42 cm</td><td>44 cm</td><td>96 cm</td></tr>
</table>
</td></tr>
<tr><td>2.</td><td>2_11 Mathematics 4474</td><td>MENSURATION</td><td>Shown below is a jar which is in the shape of a right circular cylinder. What is the length of the longest stick that could fit in this jar (without bending or breaking the stick and with no part sticking out) ?</td><td> 
</td><td>B</td></tr>
<tr><td colspan="5">
<table>
<tr><th colspan="4">Answer Options</th></tr>
<tr><th>Option A</th><th>Option B</th><th>Option C</th><th>Option D</th></tr>
<tr><td>12 cm</td><td>13 cm</td><td>14.25 cm</td><td>17 cm</td></tr>
</table>
</td></tr>
</table>

3.	2_11 Mathematics 4480	MENSURATION	A small circle is shaded inside a larger circle. If the area of the smaller circle is half the area of the larger, the ratio of the radius of the smaller circle to that of the larger circle is		C

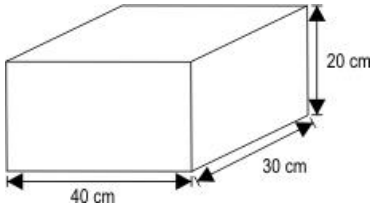
Answer Options			
Option A	Option B	Option C	Option D
$\frac{1}{2}$	$\frac{1}{4}$	$\frac{1}{\sqrt{2}}$	$\frac{\pi}{\sqrt{2}}$

4.	2_11 Mathematics 4484	MENSURATION	What will be the area of the circle shown if the area of the shaded part is 5 sq. cm?		B

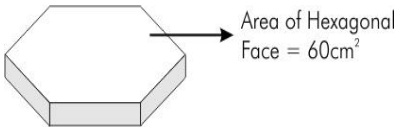
Answer Options			
Option A	Option B	Option C	Option D
25 sq. cm	60 sq. cm	25π sq. cm	150 sq. cm

5.	2_11 Mathematics 5334	MENSURATION	PQRS is a square grid made of unit squares of side 1cm. I want to trace a path from P to Q along the lines of this grid WITHOUT TOUCHING THE SIDES OF ANY SHADED SQUARE. (Touching the corner of a shaded square is allowed). What would be the MINIMUM distance covered in tracing such a path?		D

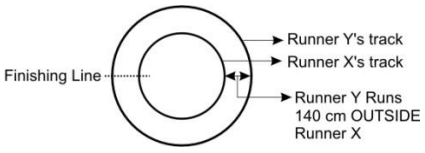
Answer Options			
Option A	Option B	Option C	Option D
4 cm	8 cm	12 cm	14 cm

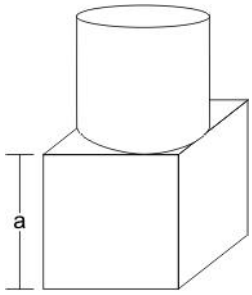
6.	2_11 Mathematics 5300	MENSURATION	What is the length of the longest stick that can be packed in the box of the dimensions shown below?		C

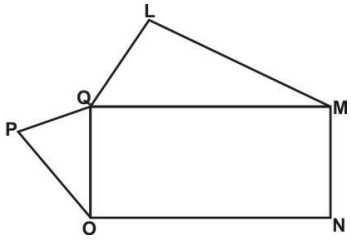
Answer Options			
Option A	Option B	Option C	Option D
90 cm	70 cm	$\sqrt{2900}$ cm	$\sqrt{2400}$ cm

7.	2_11 Mathematics 5304	MENSURATION	Tiles identical to the one shown below are piled up one on top of another to form a tower of volume 1830 cm^3. What is the height of the tower (in cm)?		B

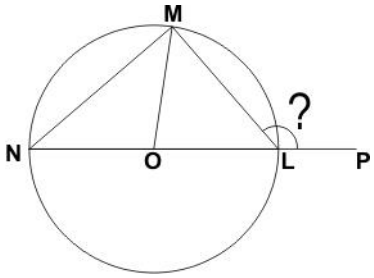
Answer Options			
Option A	Option B	Option C	Option D
18.3	30.5	183	Can not say unless the number of tiles used is given.

8.	2_11 Mathematics 5315	MENSURATION	Two runners X and Y have to race around the circular track shown below. For safety, runner X is asked to run along the inner circle and runner Y along the outer, which is 140 cm outside the inner one. If the race is of 4 laps (rounds) for runner X, how many metres ahead of him should runner Y start to make the race fair?		D

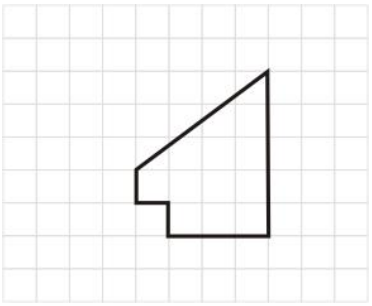
		Answer Options				
		Option A	Option B	Option C	Option D	
		1.4	5.6	8.3	35.2	
9.	2_11 Mathematics 4462	MENSURATION	The cuboid shown below is made of 3 unit cubes like the one to its left: If the surface area of the cube is 18 sq cm, what is the surface area of the cuboid in sq cm?			A
		Answer Options				
		Option A	Option B	Option C	Option D	
		42	48	54	81	
10.	2_11 Mathematics 5328	MENSURATION	Hiralal has two wooden cubes of side 'a' cm each. He carves one of them into the LARGEST POSSIBLE CYLINDER and fixes the two solids together as shown below. He now wants to cover this solid entirely with a coat of paint. Assuming pi = 3, the total area to be painted (in cm^2) will be close to			B
		Answer Options				
		Option A	Option B	Option C	Option D	
		$8.75a^2$	$9a^2$	$5a^2$	$12a^2$	

11.	2_11 Mathematics 5325	MENSURATION	In the figure, perimeter of LMQ is 24 cm, perimeter of OPQ is 14 cm and the perimeter of rectangle QMNO is 28 cm. The perimeter of hexagon LMNOPQ (in cm) is		C

Answer Options			
Option A	Option B	Option C	Option D
66 cm	39.3 cm	38 cm	19.7 cm

12.	2_11 Mathematics 5311	MENSURATION	Diameter NOL of the circle (with centre O) shown below is produced to P. ∠ONM : ∠OML = 4 : 5. The measure of ∠PLM is		C

Answer Options			
Option A	Option B	Option C	Option D
50°	100°	130°	140°

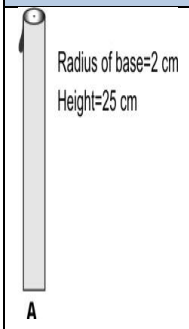
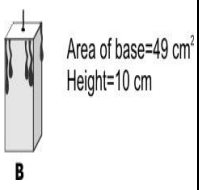
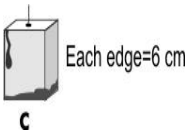
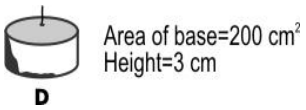
13.	3_19 Mathematics 2803	MENSURATION	The grid shown consists of unit squares. What is the perimeter of the figure shown on the grid?		C

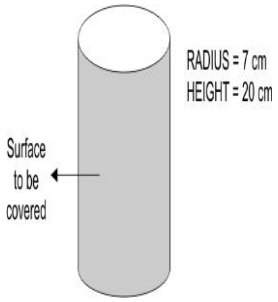
Answer Options			
Option A	Option B	Option C	Option D
14.5 units	15 units	16 units	20 units

14	2_11 Mathematics 5302	MENSURATION	The circumference of the rim of a regular sized glass would be about		A
			Answer Options		
			Option A	Option B	Option C	Option D
			22cm	14cm	10cm	08cm
15	2_11 Mathematics 4468		The diameter of a regular sized cricket ball would be about			B
			Answer Options			
			Option A	Option B	Option C	Option D
			4cm	7cm	10cm	13cm

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
1	2_10 Mathematics 5909	SURFACE AREAS AND VOLUMES	Sonali has about half a litre of molten wax to make a candle. Which of these candles could she have made using the entire quantity of wax? (1 cm^3 =1ml)		B

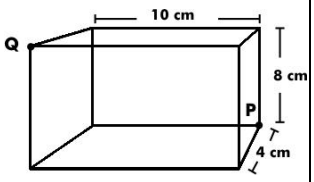
Answer Options

Option A	Option B	Option C	Option D
			

2	2_10 Mathematics 5915	SURFACE AREAS AND VOLUMES	Zubin wants to cover the CURVED SURFACE of an old waste paper basket with coloured paper. The dimensions of the basket are shown below. What is the total area that has to be covered with paper?		C

Answer Options

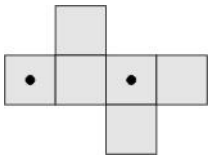
Option A	Option B	Option C	Option D
220 cm^2	440 cm^2	880 cm^2	1760 cm^2

3	2_10 Mathematics 5917	SURFACE AREAS AND VOLUMES	Travelling only along the edges and covering a distance of exactly 22 cm, how many different routes can be taken to go from corner P to corner Q of this cuboid?		C
		Answer Options			

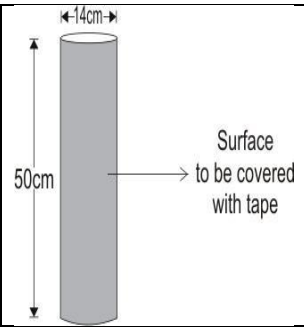
Option A	Option B	Option C	Option D
10	8	6	1

4	2_10 Mathematics 5919	SURFACE AREAS AND VOLUMES	The formula for calculating the area of the walls of a rectangular room, A is given as: $A = 2h(l + b)$, where h is the height of the room, l its length and b its breadth Which of the following would be the correct formula to find the breadth of a room when the area, height and length are given?		D
		Answer Options			

Option A	Option B	Option C	Option D
A - 2hl	$\frac{A-l}{2h}$	$\frac{-2h}{A-l}$	$\frac{A}{2h}$ - l

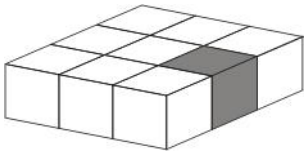
5	2_10 Mathematics 5922	SURFACE AREAS AND VOLUMES	A piece of cardboard is cut to the shape shown and 2 dots are marked on it. The cardboard is then folded along the lines to form a CUBE. Which of the cubes shown here CAN be constructed from the cardboard piece?		A
		Answer Options			

Option A	Option B	Option C	Option D
 A	 B	 C	 D

6	3_18 Mathematics 3417	SURFACE AREAS AND VOLUMES	What is the length of tape required to cover the entire outer CURVED surface of the pipe shown below if the width of the tape used is 2 cm? (Assume that there is no overlap of tape)		D

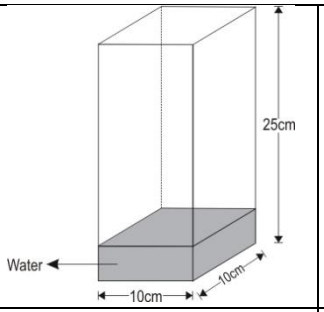
Answer Options

Option A	Option B	Option C	Option D
22 cm	25 cm	7.7 m	11 m

7	3_18 Mathematics 3399	SURFACE AREAS AND VOLUMES	The cuboid shown below consists of 9 cubes of side 1 unit each. If the shaded unit cube is REMOVED, what will be the surface area of the remaining solid?		C

Answer Options

Option A	Option B	Option C	Option D
24 sq. units	28 sq. units	30 sq. units	32 sq. units

8	3_18 Mathematics 3407	SURFACE AREAS AND VOLUMES	250 ml of water is poured into a container like the one shown below which already contains some water. Assuming that no water spills out, what will be the increase in the level of water in the container? (1 ml = 1 cm^3)		A

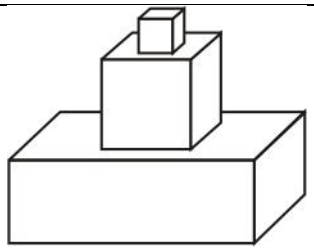
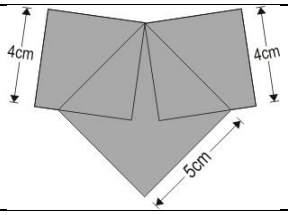
Answer Options

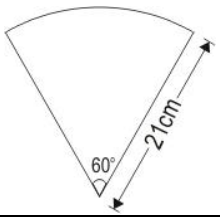
Option A	Option B	Option C	Option D
2. 5 cm	5 cm	10 cm	We can't say

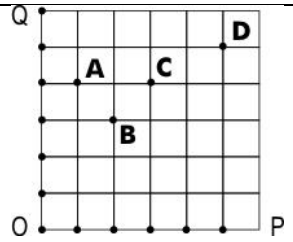
9	3_19 Mathematics 2788	SURFACE AREAS AND VOLUMES	A solid cylinder made of pure metal has a mass of 24 kg. What would the mass be if it were twice as thick but only half as long?		D

Answer Options

Option A	Option B	Option C	Option D
12 kg	24 kg	36 kg	48kg

10	3_19 Mathematics 2804	SURFACE AREAS AND VOLUMES	A cube of side 1 metre is stuck on top of another cube of side 2 metres, which in turn is stuck on top of a cuboid of dimensions (6 m x 5 m x 3 m) to form the solid shown below. The entire exposed surface of this solid (including the bottom of the cuboid) has to be painted. How many square metres is that?		B
		Answer Options			
		Option A	Option B	Option C	Option D
		151	146	120	113
11	3_18 Mathematics 3420	SURFACE AREAS AND VOLUMES	Two squares of sides 4 cm and one square of side 5 cm are placed as shown. The shaded area is:		C
		Answer Options			
		Option A	Option B	Option C	Option D
		37 cm^2	41 cm^2	45 cm^2	57 cm^2

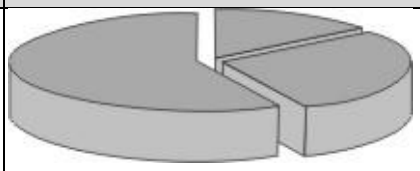
Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
12	3__18 Mathematics 3401	SURFACE AREAS AND VOLUMES	The piece below is cut out from a circular sheet of radius 21 cm. What is the area of the piece?		B
		Answer Options			
		Option A	Option B	Option C	Option D

			23.1 cm^2	231 cm^2	346.5 cm^2	441 cm^2	
13	3__18 Mathematics 3410	SURFACE AREAS AND VOLUMES	The floor of a room that is 6 m long and 4 m 20 cm wide has to be tiled entirely with square tiles OF EQUAL SIZE. What is the MINIMUM number of square tiles with which this can be done? (No tile can be broken or cut)				D
		Answer Options					
			Option A	Option B	Option C	Option D	
			30	42	60	70	
14	2__10 Mathematics 5902	SURFACE AREAS AND VOLUMES	In the grid shown below, the distance between any two consecutive points marked on OP (or OQ) is taken to be the unit distance. Which point on the grid is at a distance of 5 units from O?				C
		Answer Options					
			Option A	Option B	Option C	Option D	
			A	B	C	D	
15	2__10 Mathematics 5906	SURFACE AREAS AND VOLUMES	Points P, Q and R are co-planar. In which of the following cases will they NECESSARILY be collinear?				C
		Answer Options					
			Option A	Option B	Option C	Option D	
			When PQ = PR	When PQ + PR > QR	When PQ + QR = PR	When PR < PQ + QR	

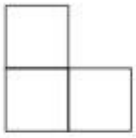
SET-18 MATHS-IX

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
1	5_29 11410	SURFACE AREAS & VOLUMES	One man takes one day to dig a 4 m long trench. How long would it take 2 men working at the same rate to dig a 16 m long trench?		B

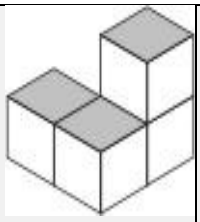
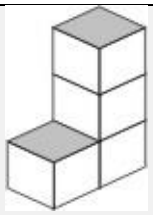
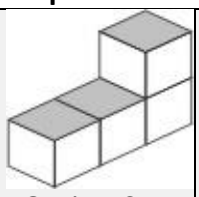
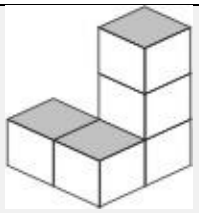
Answer Options			
Option A	Option B	Option C	Option D
1 day	2 days	4 days	8 days

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
2	5_29 11412	SURFACE AREAS & VOLUMES	A cake is cut into 3 pieces whose weights are in the ratio 2 : 1 : 4.If the third piece weighs 360 g more than the second, how much did the whole cake weigh?		C

Answer Options			
Option A	Option B	Option C	Option D
1.44 kg	1.26 kg	840 g	630 g

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
3	5_29 11417	SURFACE AREAS & VOLUMES	A solid shape made by joining identical cubes is placed on a table. When viewed from different sides, the solid looks as shown below.Which of these could be the solid?	 As seen from the TOP	D

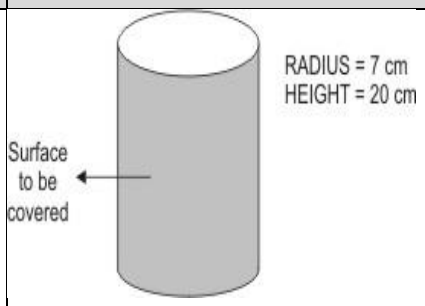
Answer Options

Option A	Option B	Option C	Option D
			

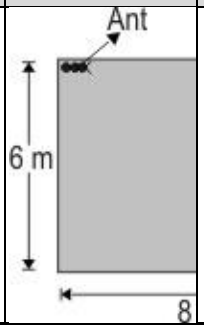
Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
4	5_29 11421	SURFACE AREAS & VOLUMES	Sonali has about half a litre of molten wax to make a candle. Which of these candles could she have made using the ENTIRE quantity of wax?	(1 cm^3 = 1 ml)	B

Answer Options

Option A	Option B	Option C	Option D
Radius of base=2 cm Height=25 cm	Area of base=49 cm^2 Height=10 cm	Each edge=6 cm	Area of base=200 cm^2 Height=3 cm

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
5	5_29 11422	SURFACE AREAS & VOLUMES	Zubin wants to cover the CURVED SURFACE of an old waste paper basket with colored paper. The dimensions of the basket are shown below. What is the total area that has to be covered with paper?		C

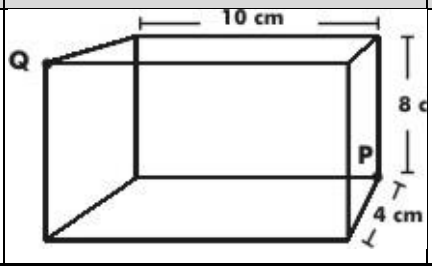
Answer Options			
Option A	Option B	Option C	Option D
220 cm^2	440 cm^2	880 cm^2	1760 cm^2

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
6	5_29 11431	SURFACE AREAS & VOLUMES	An ant at one corner of an 8 m x 6 m rectangular floor spots a piece of sweet at the opposite corner.What is the MINIMUM distance the ant has to travel to reach the sweet?		B

Answer Options			
Option A	Option B	Option C	Option D
7 m	10 m	14 m	28 m

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
7	5_29 11436	SURFACE AREAS & VOLUMES	Aftab is checking his weight on a weighing scale. What is the reading on the scale, shown in the Image?		D

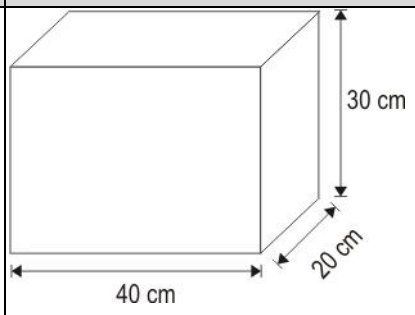
Answer Options			
Option A	Option B	Option C	Option D
50.3 kg	50.7 kg	52 kg	53.5 kg

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
8	5_29 11439	SURFACE AREAS & VOLUMES	Travelling only along the edges and covering a distance of exactly 22 cm, how many different routes can be taken to go from corner P to corner Q of this cuboid?		C

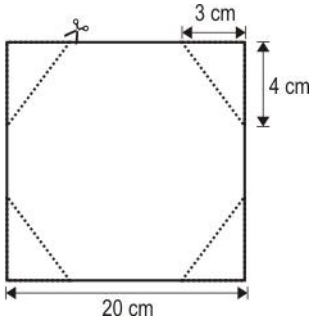
Answer Options			
Option A	Option B	Option C	Option D
10	8	6	1

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	CorrectAnswer (Option-A,B,C,D)
10	5_26 1631	Surface areas & Volumes	Which of these could be the approximate width of a regular sized basketball court?		B

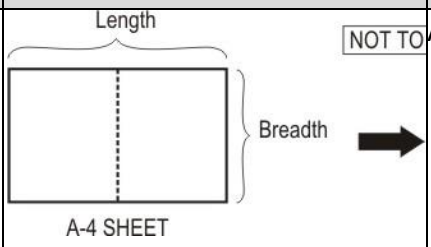
Answer Options			
Option A	Option B	Option C	Option D
5 m	15 m	35 m	50 m

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	CorrectAnswer (Option-A,B,C,D)
12	5_26 1650	Surface areas & Volumes	Dalbir has to carve a right circular cylinder of the maximum possible volume from this wooden cuboid shown in the image .What would be the volume (in cm^3) of the cylinder?		B

Answer Options			
Option A	Option B	Option C	Option D
16000 π	4500 π	4000 π	3000 π

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	CorrectAnswer (Option-A,B,C,D)
13	5_26 1652	Surface areas & Volumes	4 identical triangles are cut off from the 4 corners of a square of side 20 cm as shown in the image.By how much did the perimeter decrease (with respect to the original square)?		B

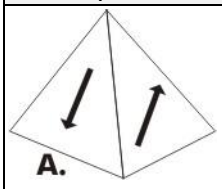
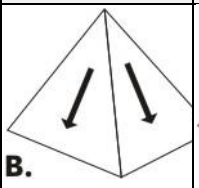
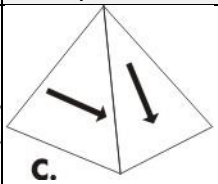
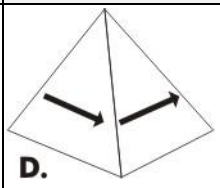
Answer Options			
Option A	Option B	Option C	Option D
4 cm	8 cm	24 cm	28 cm

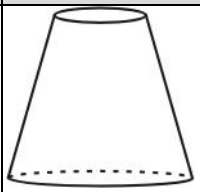
Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	CorrectAnswer (Option-A,B,C,D)
15	5_26 1658	Surface areas & Volumes	When an A-4 sized sheet of paper is folded up once through the centre as shown, the 'length to breadth' ratio of the folded up piece is the same as the 'length to breadth' ratio of the original sheet.What is the 'length to breadth' ratio of an A-4 sized sheet?		A

Answer Options			
Option A	Option B	Option C	Option D
√ 2 : 1	03:02	02:01	(information insufficient)

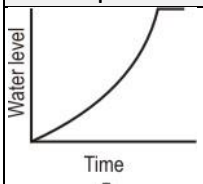
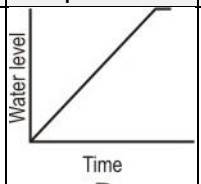
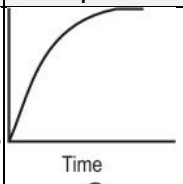
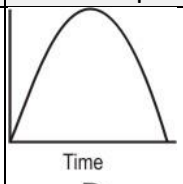
Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	CorrectAnswer (Option-A,B,C,D)
1	5_26 1660	Surface areas & Volumes	The cardboard piece shown below can be folded up along the dotted lines to form a triangular pyramid.Which of the following is a view of the pyramid formed?		A

Answer Options

Option A	Option B	Option C	Option D
 A.	 B.	 C.	 D.

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	CorrectAnswer (Option-A,B,C,D)
4	5_26 1664	Surface areas & Volumes	The container shown here is filled with water from a uniformly dripping tap.Which of these graphs best represents the water level in the container with respect to time, as it is being filled?		A

Answer Options

Option A	Option B	Option C	Option D
 **A.**	 **B.**	 **C.**	 **D.**

Set-21 Maths-IX

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
1	5_29 11419	STATISTICS	For which of these groups of numbers is the AVERAGE an EVEN number?		B

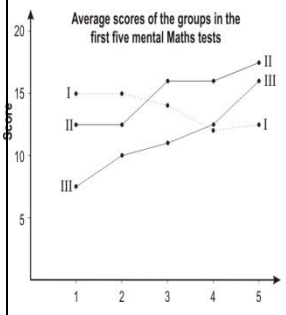
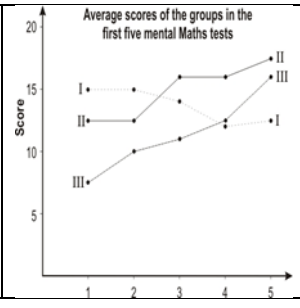
Answer Options			
Option A	Option B	Option C	Option D
10, 11, 12, 13	23, 25, 27, 29	20, 30, 40, 50	1, 2, 3, 4, 5, 6

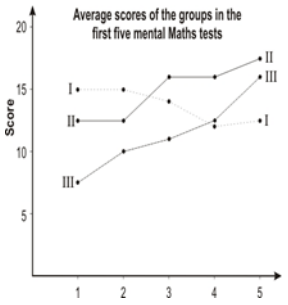
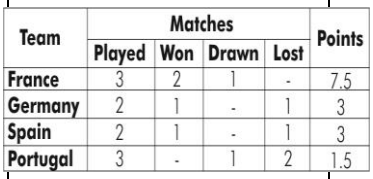
Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	CorrectAnswer (Option-A,B,C,D)
5	5_28 10091	STATISTICS	A player's Batting Average is calculated as the total number of runs scored (in all innings) divided by the number of times the player has been out. What is Rahul's batting average in test cricket?		D

Answer Options			
Option A	Option B	Option C	Option D
22.3	27	153	Data is insufficient

Subject: Mathematics SET-22

Grade: 9th

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
1	2_10 Mathematics 5895	Statistics	A survey was conducted among Class 9 students of Ujjwal High School in which each student was asked to name his or her favourite sport and the favourite player from that sport. 40% of the group chose cricket as their favourite sport and of these, 40% named Tendulkar as their favourite player. What percentage of students in the group chose cricket as their favourite sport but did NOT name Tendulkar as their favourite player?		C
		Answer Options			
		Option A: 80%	Option B: 60%	Option C: 24%	Option D: 16%
3	3_18 Mathematics 3411	STATISTICS	A class is divided into 3 groups. The whole class is given a Mental Maths test every week. The groupwise performance of the class in the first five tests is shown in the graph below. Study it to answer the question. Which group improved continually over the five tests?,		C
		Answer Options			
		Option A: Group I	Option B: Group II	Option C: Group III	Option D: None of them
4	3_18 Mathematics 3412	Statistics	A class is divided into 3 groups. The whole class is given a Mental Maths test every week. The groupwise performance of the class in the first five tests is shown in the graph below. Study it to answer the question.		D

			In which test did Group III's average score go above 15 for the first time?		
		Answer Options			
		Option A	Option B	Option C	Option D
		Test 2	Test 3	Test 4	Test 5
5	3_18 Mathematics 3413	Statistics	A class is divided into 3 groups. The whole class is given a Mental Maths test every week. The groupwise performance of the class in the first five tests is shown in the graph below. Study it to answer the question. What is the average score of the entire class in Test 2?		D
		Answer Options			
		Option A	Option B	Option C	Option D
		10	12.5	13	We can't say
6	3_19 Mathematics 2782	statistics	The average weight of Ajay's brother and sister is 39 kg. The average weight of all three of them is 30 kg. What is Ajay's weight in kilograms?		C
		Answer Options			
		Option A	Option B	Option C	Option D
		3	9	12	34.5
7	3_19 Mathematics 2789	Statistics	In the first round of a football tournament, there are 4 teams in a group and every team must play one match against every other team in the group. The points table of the group after a few matches is shown below. How many points are given for a win in this round of the tournament?" Study the paragraph and table given below to answer the question.		B

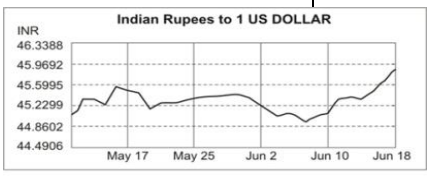
Team	Matches				Points
	Played	Won	Drawn	Lost	
France	3	2	1	-	7.5
Germany	2	1	-	1	3
Spain	2	1	-	1	3
Portugal	3	-	1	2	1.5

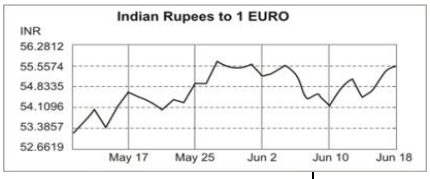
Answer Options				
Option A	Option B	Option C	Option D	
4	3	2	1	

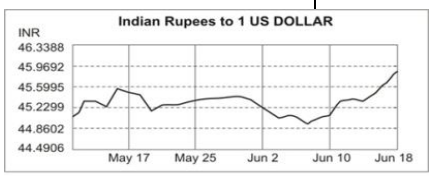
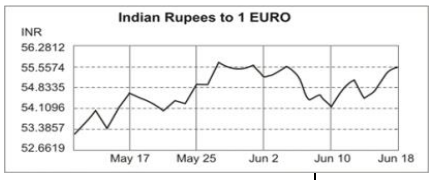
<table>
<tr><td>8</td><td>3_19
Mathematics

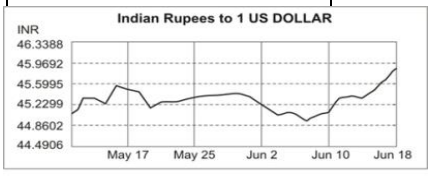
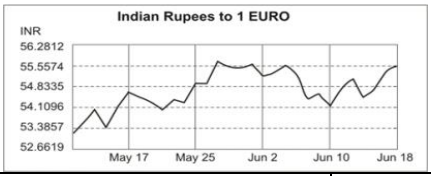
2790</td><td>Statistics</td><td>In the first round of a football tournament, there are 4 teams in a group and every team must play one match against every other team in the group. The points table of the group after a few matches is shown below. What was the result of the Germany versus Portugal match? Study the paragraph and table given below to answer the question.</td><td><table><tr><th rowspan="2">Team</th><th colspan="4">Matches</th><th rowspan="2">Points</th></tr><tr><th>Played</th><th>Won</th><th>Drawn</th><th>Lost</th></tr><tr><td>France</td><td>3</td><td>2</td><td>1</td><td>-</td><td>7.5</td></tr><tr><td>Germany</td><td>2</td><td>1</td><td>-</td><td>1</td><td>3</td></tr><tr><td>Spain</td><td>2</td><td>1</td><td>-</td><td>1</td><td>3</td></tr><tr><td>Portugal</td><td>3</td><td>-</td><td>1</td><td>2</td><td>1.5</td></tr></table></td><td>A</td></tr>
<tr><td></td><td></td><td colspan="3">Answer Options</td><td></td></tr>
<tr><td></td><td></td><td colspan="3"><table><tr><th>Option A</th><th>Option B</th><th>Option C</th><th>Option D</th></tr><tr><td>Germany won</td><td>The match was drawn</td><td>Match not played yet</td><td>Data given is not enough to say anything definitely</td></tr></table></td><td></td></tr>
<tr><td>9</td><td>3_19
Mathematics

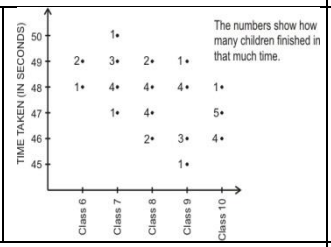
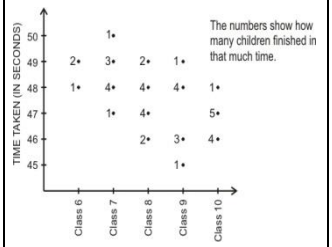
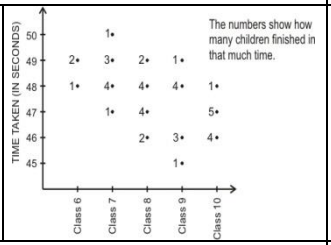
2791</td><td>Statistics</td><td>In the first round of a football tournament, there are 4 teams in a group and every team must play one match against every other team in the group. The points table of the group after a few matches is shown below. The first round will be completed after each team has played each of the others once. How many matches of the first round are yet to be played?</td><td><table><tr><th rowspan="2">Team</th><th colspan="4">Matches</th><th rowspan="2">Points</th></tr><tr><th>Played</th><th>Won</th><th>Drawn</th><th>Lost</th></tr><tr><td>France</td><td>3</td><td>2</td><td>1</td><td>-</td><td>7.5</td></tr><tr><td>Germany</td><td>2</td><td>1</td><td>-</td><td>1</td><td>3</td></tr><tr><td>Spain</td><td>2</td><td>1</td><td>-</td><td>1</td><td>3</td></tr><tr><td>Portugal</td><td>3</td><td>-</td><td>1</td><td>2</td><td>1.5</td></tr></table></td><td>A</td></tr>
<tr><td></td><td></td><td colspan="3">Answer Options</td><td></td></tr>
<tr><td></td><td></td><td colspan="3"><table><tr><th>Option A</th><th>Option B</th><th>Option C</th><th>Option D</th></tr><tr><td>1</td><td>2</td><td>3</td><td>6</td></tr></table></td><td></td></tr>
<tr><td>10</td><td>3_19
Mathematics

2797</td><td>Statistics</td><td>The graphs below show the exchange rates for Indian rupees (INR) to 1 US dollar and 1 Euro during the period between May 9 and June 18, 2004. Study the graphs to answer the question. According to the graph shown here, about how many Indian Rupees would Ameena have got in exchange for 100 Euros on May 25?</td><td> 


</td><td>C</td></tr>
<tr><td></td><td></td><td colspan="3">Answer Options</td><td></td></tr>
</table>

			Option A	Option B	Option C	Option D	
			27.4	54.8	5483	5556	
11	3_19 Mathematics 2798	Statistics	The graphs below show the exchange rates for Indian rupees (INR) to 1 US dollar and 1 Euro during the period between May 9 and June 18, 2004. Study the graphs to answer the question. During the period shown, on which day was the Indian Rupee STRONGEST against the US dollar? (NOTE: We say that the Rupee is STRONGER when its VALUE IMPROVES when compared to the dollar)		 	C
		Answer Options					
			Option A	Option B	Option C	Option D	
			May 15	May 25	Jun 08	June 18	

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
12	3_19 Mathematics 2799	Statistics	The graphs below show the exchange rates for Indian rupees (INR) to 1 US dollar and 1 Euro during the period between May 9 and June 18, 2004. Study the graphs to answer the question. During which of the following periods did the Euro gain while the US dollar fell against the Rupee	 	A
		Answer Options					
			Option A	Option B	Option C	Option D	

			June 2 to June 4	June 8 to June 10	May 25 to May 27	May 17 to May 20	
13	2_11 Mathematics 4477	Statistics	Some children of classes 6 to 10 of Vikas School participate in a race. The time they take to complete is shown in the graph below. The winner of the race was a child from class				C
		Answer Options					
			Option A	Option B	Option C	Option D	
			7	8	9	10	
14	2_11 Mathematics 4478	Statistics	Some children of classes 6 to 10 of Vikas School participate in a race. The time they take to complete is shown in the graph below. The time taken by the maximum number of children to finish the race was:				C
		Answer Options					
			Option A	Option B	Option C	Option D	
			46 seconds	47 seconds	48 seconds	49 seconds	
15	2_11 Mathematics 4479	Statistics	Some children of classes 6 to 10 of Vikas School participate in a race. The time they take to complete is shown in the graph below. The average time taken by the class 6 children was,				C
		Answer Options					
			Option A	Option B	Option C	Option D	
			15.83 seconds	48.5 seconds	48.67 seconds	48 seconds	

Set-23 Maths-IX

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	CorrectAnswer (Option-A,B,C,D)
1	5_27 8441	Statistics	While taking a 5-minute long typing test, Neela typed at a speed of 48 words per minute for the first 3 minutes. What should be her typing speed for the next two minutes if she wants to average 50 words per minute for the whole test?		C

Answer Options			
Option A	Option B	Option C	Option D
32 words per minute	52 words per minute	53 words per minute	56 words per minute

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	CorrectAnswer (Option-A,B,C,D)
2	5_26 1632	Statistics	Look at the pattern below: $\frac{2+4}{2} = 3$, $\frac{2+4+6}{3} = 4$, $\frac{2+4+6+8}{4} = 5$ According to this, what would be the average of the first twenty even positive integers?		A

Answer Options			
Option A	Option B	Option C	Option D
21	20	19	11

<table>
<tr><td rowspan="4">6</td><td rowspan="4">2_10

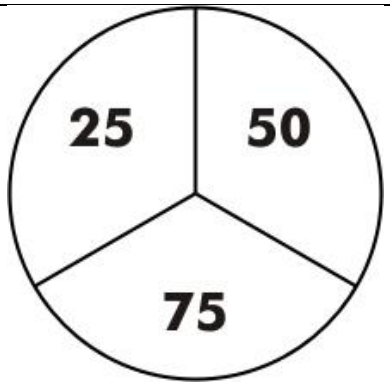
Mathematics

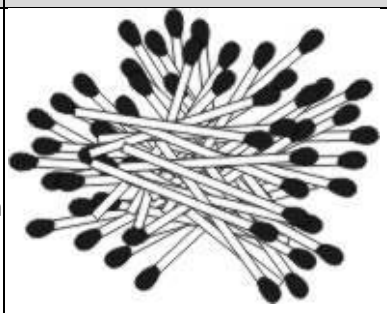
5900</td><td>Probability</td><td colspan="2">Nafisa has a box of bangles. $\frac{1}{2}$ of all the bangles in the box are red, $\frac{1}{3}$ are green and $\frac{1}{6}$ are blue. If Nafisa takes out a bangle from the box without looking, of which colour is it MOST LIKELY to be?</td><td></td><td rowspan="4">A</td></tr>
<tr><td colspan="4">Answer Options</td></tr>
<tr><td>Option A</td><td>Option B</td><td>Option C</td><td>Option D</td></tr>
<tr><td>Red</td><td>Green</td><td>Blue</td><td>Data given is not enough</td></tr>
<tr><td rowspan="4">7</td><td rowspan="4">3_19
Mathematics

2802</td><td>Probability</td><td colspan="2">If two fair coins are tossed simultaneously, what are the chances of both coming up 'Heads'?</td><td></td><td rowspan="4">B</td></tr>
<tr><td colspan="4">Answer Options</td></tr>
<tr><td>Option A</td><td>Option B</td><td>Option C</td><td>Option D</td></tr>
<tr><td>10%</td><td>25%</td><td>50%</td><td>75%</td></tr>
<tr><td rowspan="4">8</td><td rowspan="4">2_11

Mathematics

4482</td><td>Probability</td><td colspan="2">Here is a modified dart board. A player scores points by throwing darts at it. Points are earned according to the area of the dart board where the dart lands.

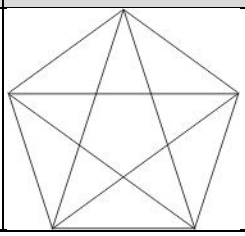
If the dart is thrown twice at this board, which of the following would be the MOST LIKELY total score? (Assume that in both throws the dart lands on the board)</td><td> 
</td><td rowspan="4">C</td></tr>
<tr><td colspan="4">Answer Options</td></tr>
<tr><td>Option A</td><td>Option B</td><td>Option C</td><td>Option D</td></tr>
<tr><td>50</td><td>75</td><td>100</td><td>150</td></tr>
</table>

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	CorrectAnswer (Option-A,B,C,D)
9	5_28 10111	PROBABILITY	Mili and Aastha are playing a game which goes like this: starting with a large pile of matchsticks, each player takes turns to take away 1, 2 or 3 matchsticks from it. No player can pass a turn. The process continues till there are no matchsticks left and the player who takes the last matchstick(s) is the winner. In a particular game, after a series of moves, 5 matchsticks remain in the pile and it is Mili's turn. What should be the no. of matchsticks she should take to MAKE SURE that she wins the game?		A

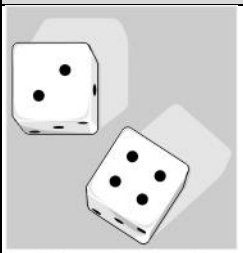
Answer Options			
Option A	Option B	Option C	Option D
1	2	3	It's not possible for her to win this game.

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	CorrectAnswer (Option-A,B,C,D)
10	5_28 10093	PROBABILITY	In a single throw of die , which of the following has more than 50% chance of occurring?		A

Answer Options			
Option A	Option B	Option C	Option D
getting a non-negative score	getting a negative score	getting a score of 0	getting a score below minus 3

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	CorrectAnswer (Option-A,B,C,D)
13	5_27 8453	Probability	What is the smallest number of colours needed to colour the following figure so that NO TWO regions with more than a point common have the same colour?		A

Answer Options			
Option A	Option B	Option C	Option D
2	3	4	5

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	CorrectAnswer (Option-A,B,C,D)
14	5_27 8454	Probability	A fair game is one in which each possible outcome has an equal chance. Two players are playing a game with two dice. Both the dice are rolled simultaneously and the numbers that turn up are added up. If this sum is even, then player 1 gets a point, and if the sum is odd, then player 2 gets a point. Is this a fair game?	 (Sum: 2 + 4 = 6)	A

Answer Options			
Option A	Option B	Option C	Option D
Yes, the game is fair.	No, the game is favourable for player 1.	No, the game is favourable for player 2.	Can't say.

Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	CorrectAnswer (Option-A,B,C,D)
15	5_27 8436	Probability	Of the 15 charts put up in a classroom, 6 are on Science and 8 are made on white chart paper. If 4 of the Science charts are made on coloured chart paper, how many of the charts made on coloured paper are NOT on Science?		C

Answer Options			
Option A	Option B	Option C	Option D
1	2	3	4