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

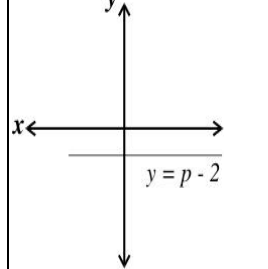| Answer Options				
Option A	Option B	Option C	Option D	
3x	4x/3	3x/4	3x/2	
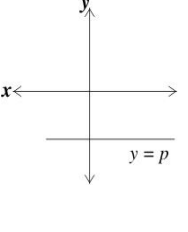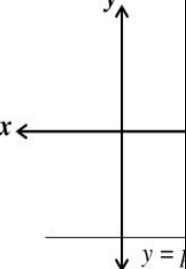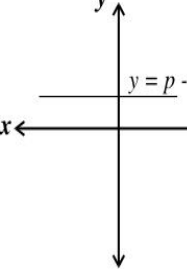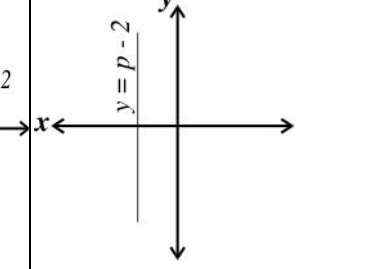
Q. N	Folder name & Question Code	Topic	Question with Answer Options	Image (If Any)	Correct Answer (Option-A,B,C,D)
3	5_26 Mathematics 1654	Linear Equations In Two Variables	A 3 kg bag of rice lasts exactly 30 days for Mrs. and Mr. Pestonjee when both consume equal amounts. If Mr. Pestonjee cuts down 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)	A ← 5 B ← 3 C ← B C ← C + 1 A ← A + B No Is C = 5? Yes PRINT A	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	Value of m — Ratio; 2 — 3:2; 3 — 4:3; 4 — 5:4	D

Answer Options				
Option A	Option B	Option C	Option D	
$\dfrac{m}{m-1}$	$\dfrac{3m}{2}$	$\dfrac{m}{m+1}$	$\dfrac{m+1}{m}$	

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)