

5

Find the value of a so that $5x + 2ay = 3a$ has a solution $x = 1$ and $y = 1$

- 3 5 7 9

6

Find the value of ' a ' so that $x - y = a$ has a solution $x = 1$ and $y = 1$

- 0 1 -1 2

7

Find the value of m so that $(-m, 3)$ is a solution for the equation $4x + 9y = 3$

- 6 4 8 9

8

If $x = 2$ and $y = 2$ is a solution of the equation $7x + py = 2$, then find the value of p

- 6 -6 4 -4

9

If $(3, 2)$ is a solution of the equation $3x - ky = 5$, then find the value of ' k '

- 1 2 3 -2

10

The equation of x-axis is

- $x=0$ $y=0$ $x+y=0$ $x-y=0$

- $1.x + 1.y = 7$ $0.x + 0.y = 7$ $1.x + 0.y = 7$ $1.x + 0.y = -7$

18

Any point on x - axis is of the form

- (x, y) $(x, 0)$ $(0, 0)$ $(0, y)$

19

“The age of x exceeds the age of y by five years”. Represent this statement as a linear equation

- $x - y = 5$ $x + y = 5$ $y - x = 0$ $x - y + 5 = 0$

20

If the point $(3, a)$ lies on the line represented by a linear equation $2x - 3y = 5$, then the value of a is _____

- $\frac{1}{3}$ $\frac{2}{3}$ $\frac{1}{2}$ 0

21

Find out, which equation of the line passes through the origin

- $y = kx + 7$ $y = kx - 24$ $y + kx + 5 = 0$ $y = kx$

22

The linear equation $2x + 5y = 7$ has _____

- infinitely many solutions one solution two solutions No solution

23

If a line represented by the linear equation $3x + \alpha y = 8$ passes through the point $(2, 2)$, then find the value of α

- 0 1 2 3

24

Which of the following is a solution of the equation $2x - 3y = 7$

- (5, 2) (2, 5) (5, 1) (0, 0)

25

The condition that the equation $ax + by + c = 0$ represents a linear equation in two variables

- $a \neq 0$ and $b \neq 0$ $a \neq 0$ and $b \neq 1$ $a \neq 1$ and $b \neq 0$
 None of the above

26

Which of the following is the solution of $y - 7 = 0$

- (7, 7) (0, 7) (0, 0) (7, 0)

27

Which of the following is the solution of $y - 5 = 0$

- (5, 5) (1, 5) (0, 5) (6, 5)

28

The point of the form (a, a) lies on the line _____

- $x + y = 0$ $y - x = 0$ $x - y = 0$ $x + 2y = 0$

29

The graph of linear equation $2x + 3y = 6$ is a line which meet the x - axis at _____

- (3, 3) (3, 1) (0, 0) (3, 0)

30

$x = 5$ and $y = 2$ is a solution of _____

- $x + 2y = 7$ $5x + 2y = 7$ $x + y = 7$ $5x + y = 7$

31

The work done by a body on applying a constant force is directly proportional to the distance travelled by the body. Express this in the form of an equation in two variables.

- $kx - 2y = 0$ $kx - y = 0$ $x - y = 0$ $x + ky = 0$

32

The cost of a note book is twice the cost of a pen . Write the linear equation in two variables to represent this statement.

- $2x - y = 0$ $x - y = 0$ $2x - 2y = 0$ $2x + y = 0$

33

Solve $2x + 7 = 25 - 6x$

- $\frac{9}{4}$ $\frac{9}{8}$ $\frac{18}{4}$ $\frac{19}{8}$

34

Find the value of x in $\frac{12}{5}x + \frac{23}{10} = \frac{2x + 6}{5}$

- $\frac{-11}{20}$ $\frac{-11}{23}$ $\frac{11}{20}$ $\frac{-13}{20}$

35

From the linear equation $7x + 5 = 24x - 68$, find the value of x

- $\frac{75}{17}$ $\frac{73}{19}$ $\frac{73}{17}$ $\frac{79}{17}$

36

Find the value of x

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- $7x + 8y = 87$ and $3x + 2y = 66$ $7x + 8y = 87$ and $6x - 4y = 66$
 $7x + 8y = 87$ and $6x + 4y = 66$ $x + y = 87$ and $x - y = 66$

48

The taxi fare in a city comprise of a fixed charge together with the charge per distance covered . For a journey of 10 km the charge paid is Rs.75.

Formulate a linear equation in two variables to represent the above statement.

- $x - 10y - 75 = 0$ $x + 10y + 75 = 0$ $x + 10y - 75 = 0$ $x + y - 75 = 0$

49

The cost of petrol in a city is Rs. 50 per litre . Formulate a linear equation with x representing the number of litres and y representing the total cost (in Rs.)

- $50x - 50y = 0$ $50x - y = 0$ $x - 50y = 0$ $x - y = 0$

50

The denominator of a fraction is 4 more than the numerator. Write a linear equation in two variables to represent the above statement.

- $2x + y + 4 = 0$ $x - y + 4 = 0$ $2x - y - 4 = 0$ $x - y = 4$

51

Two years ago a father was 5 times as old as his son. Two years later his age will be 8 more than the three times the age of his son.

Formulate two linear equations in two variables to represent the above statement.

- $x - 5y + 8 = 0$ and $x - 3y + 10 = 0$ $x - 5y + 10 = 0$ and $x - 3y + 12 = 0$
 $x - 5y + 8 = 0$ and $x - 3y - 12 = 0$ $x - 5y + 8 = 0$ and $2x - 3y + 12 = 0$

52

The monthly incomes of A and B are in the ratio 4 :3. And their monthly expenditures are in the ratio 13:9. If each saves Rs 1500 per month, formulate a linear equation in two variables A and B separately

- $4x - 13y - 1500 = 0$ and $3x - 11y - 1500 = 0$
- $4x - 13y - 1500 = 0$ and $3x - 9y - 1500 = 0$
- $4x - 9y - 1500 = 0$ and $3x - 9y - 1500 = 0$
- $4x - 9y - 1500 = 0$ and $3x - 13y - 1500 = 0$

53

The sum of a two digit number and the number obtained by reversing the digits is 165.

Set up a linear equation in two variables for the above statement.

- $x + y + 15 = 0$
- $x + y - 15 = 0$
- $x - y - 15 = 0$
- $x + 2y - 15 = 0$

54

The monthly incomes of A and B are in the ratio of 9 :7 and their monthly expenditures are in the ratio 4:3. If each saves Rs 1600 per month, formulate linear equations in two variables for them separately

- $9x - 4y - 1600 = 0$ and $7x - 3y - 1600 = 0$
- $9x - 4y + 1600 = 0$ and $7x - 3y - 1600 = 0$
- $9x - 4y + 1600 = 0$ and $7x - 3y + 1600 = 0$
- $9x + 4y - 1600 = 0$ and $7x + 3y - 1600 = 0$

55

Ten years ago, father was twelve times as old as his son and ten years later he will be twice as old as his son. Formulate two linear equations representing the scenarios explained above.

- $x - 12y + 110 = 0$ and $x - 2y - 10 = 0$
- $x - 12y - 110 = 0$ and $x - 2y + 10 = 0$
- $x - 12y - 110 = 0$ and $x - 2y - 10 = 0$
- $x + 12y + 110 = 0$ and $x - 2y - 10 = 0$

56

Five years ago, father was three times as old as his son and five years

later he will be twice as old as his son.

Formulate two linear equations representing the scenarios explained above.

- $x - 3y + 10 = 0$ and $x - 2y - 5 = 0$ $x - 3y + 10 = 0$ and $x - 2y + 5 = 0$
 $x - 3y + 20 = 0$ and $x - 2y - 5 = 0$ $x + 3y + 10 = 0$ and $x - 2y - 5 = 0$

57

Two numbers are in the ratio 3:4. If ten is added to both the numbers then the ratio becomes 5:6. Formulate two linear equations in two variables to express the above statement.

- $4x - 3y = 0$ and $6x - 5y + 10 = 0$ $4x - 3y = 0$ and $6x - 5y - 10 = 0$
 $4x - 3y = 0$ and $6x - y + 10 = 0$ $4x - 3y = 10$ and $6x + 5y + 10 = 0$

58

Two numbers are in the ratio 4 : 5 . If ten is added to both the numbers then the ratio becomes 5 : 6. Formulate two linear equations in two variables to express the above statement.

- $5x - 4y = 0$ and $6x - 5y + 10 = 0$ $5x - 4y = 0$ and $6x - 2y + 10 = 0$
 $5x - 3y = 0$ and $6x - 5y + 10 = 0$ $4x - 5y = 0$ and $6x - 5y + 10 = 0$

59

The taxi fare for the first km is Rs.10 and fare for the subsequent distance is Rs.6 per km.

If the distance covered is x km and the total fare is Rs. y , formulate a linear equation for this statement.

- $6x - y - 4 = 0$ $6x + y + 4 = 0$ $6x - y + 4 = 0$ $6x - y + 6 = 0$

60

The taxi fare for the first km is Rs.15 and fare for the subsequent distance is Rs.7 per km.

If the distance covered is x km and the total fare is Rs. y , find the fare for travelling a distance of 6 km

Rs.35 Rs.40 Rs.45 Rs.50

61

The denominator of a fraction is 7 more than the twice the numerator. Write the linear equation in two variables for the above statement.

$2x - y - 7 = 0$ $2x - y + 7 = 0$ $2x + y + 7 = 0$ $2x - 3y + 7 = 0$

62

The sum of a two digit number and the number obtained by reversing the digits is 55. Set up a linear equation in two variables for the above statement.

$x + y + 5 = 0$ $x - y - 5 = 0$ $x + y - 5 = 0$ $x + y - 15 = 0$

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