

4. PAIR OF LINEAR EQUATIONS IN TWO VARIABLES

1. The point of intersection of the lines represented by $3x-2y = 6$, the Y-axis is _____
2. If $x = 2$, $y = 3$ is a solution of a pair of lines $2x-3y+a = 0$ and $2x+3y-b+2 = 0$, then the relationship between a and b is _____
3. If the units and ten's digit of a two digit number are y and x respectively, then the number will be in the form of _____
4. The age of a son is one third the age of his mother. If the present age of mother is x years, then the age of the son after 12 years is _____
5. If the line $y = px-2$ passes through the point $(3, 2)$, then the value of p is _____
6. The value of $\frac{2}{\sqrt{x}} + \frac{3}{\sqrt{y}}$ when $x = 4$ and $y = 9$ is _____
7. If $ad \neq bc$, then the pair of linear equations $ax+by = p$ then and $cx+dy = p$ has _____ solutions?
8. The pair of linear equations $3x+5y = 3$, $6x+ky = 8$ do not have solutions if $k =$ _____
9. The point of the intersection of the lines $x-2 = 0$ and $y+6 = 0$ is _____
10. _____ is the area of the triangle formed by the coordinate axes and the line $x+y = 6$.
11. The sum of the two digits of a two digit number is 12. The number obtained by interchanging the two digits exceeds the given number by 18. the number is _____
12. The point $(-2, -2)$ lies in the _____ Quadrant.
13. If the difference between two numbers is 26. One number is three times the other number, then the two numbers are _____
14. If the system of equations $4x+y = 3$ and $8x+2y = 5k$ has infinite solutions, then the value of k is _____
15. The system of linear equations $x+y = 14$ and $x-y = 4$ are _____
16. If the system of linear equations $(k-3)x+3y = k$, $kx+ky = 12$ has infinite number of solutions then the value of k is _____
17. If the system of linear equations $3x-4y+7 = 0$ and $kx+3y-5 = 0$ has no solutions then value of k is _____
18. _____ is the condition if the pair of linear equations, $a_1x+b_1y+c_1 = 0$,

$a_2x+b_2y+c_2=0$, has a unique solution?

19. The sum of the numerator and the denominator of a fraction is 12. If the denominator is increased by 3, the fraction becomes $1/2$. then the fraction is _____
20. If $\frac{x+y}{xy} = 2$ & $\frac{x-y}{xy} = 6$, then value of y is _____
21. Two angles are complementary. The larger angle is 3 degrees less than twice the measure of the smaller angle. The measure of each angle is _____ and _____
22. The value of y when $x = -1/2$ that satisfies

the equation $\frac{2}{x} + \frac{3}{y} = 5$ is _____

23. The length and breadth of a rectangle are x, y respectively. The area of the rectangle gets reduced by 9 square units, if its length is reduced by 5 units and breadth is incre-ased by 3 units. Then the equation we get is _____
24. The larger of two supplementary angles exceeds the smaller by 20 degrees. Then the angles are _____ and _____
25. _____ is the value of 'a' so that the point (2, a) lies on the line represented by $4x-y=3$?

ANSWERS

1) (0, -3); 2) $3a = b$; 3) $10x+y$; 4) $\frac{x}{3} + 12$; 5) $4/3$; 6) 2 or -2;

7) unique solution;

8) $k = 10$; 9) (2, -6); 10) 18; 11) 57;

12) 3rd quadrant; 13) 39, 13; 14) $6/5$;

15) consistent; 16) 6; 17) $-9/4$;

18) $\frac{a_1 \neq b_1}{a_2 \neq b_2}$; 19) $5/7$; 20) $1/4$; 21) 31

degrees and 59 degrees; 22) $1/3$;

23) $(x-5)(y+3)=(xy-9)$; 24) 100 degrees, 80 degrees; 25) $a = 5$.