

CLASS X
REVISION WORKSHEET
LINEAR EQUATIONS IN TWO VARIABLES

Q1. If $ax - by = 0$ and $bx - ay = 0$ then the value of xy .

- (i) ab (ii) 1 (iii) 0 (iv) $\frac{a}{b}$

Q2. The value of k for which the system of linear equations $x + 3y = k - 3$, $3x + ky = 0$ has infinite many solutions is

- (i) $k = 3, -3$ (ii) $k = 0, 3$ (iii) $k = 3$ (iv) None of these

Q3. For what value of k the lines represented by $3x + 2y = 1$, $(2k + 1)x + (k + 2)y = k - 1$ are coincident lines

- (i) $k = 1$ (ii) $k = 2$ (iii) $k = 3$ (iv) $k = 4$

Q4. The area of a rectangle gets reduced by 9 square units, if its length is reduced by units and breadth is increased by 3 units. If we increase the length by 3 units and the breadth by 2 units, the area increases by 67 square units. Find the dimensions of the rectangle.

Q5. If $217x + 131y = 913$, $131x + 217y = 827$, then find the value of x and y

Q6. Draw the graphs of the pair of linear equations $x - y + 2 = 0$; $4x - y - 4 = 0$. Calculate the area of the triangle formed by the lines so drawn and the x -axis.

Q7. In a competitive examination, one mark is awarded for each correct answer while $\frac{1}{2}$

mark is deducted for every wrong answer. Jayanti answered 120 questions and got 90 marks. How many questions did she answer correctly?

Q8. Jamila sold a table and a chair for Rs 1050, thereby making a profit of 10% on the table and 25% on the chair. If she had taken a profit of 25% on the table and 10% on the chair she would have got Rs 1065. Find the cost price of each.

Q9. A train covered a certain distance at a uniform speed. If the train would have been 6 km/h faster, it would have taken 4 hours less than the scheduled time. And, if the train were slower by 6 km/hr; it would have taken 6 hours more than the scheduled time. Find the length of the journey.

Q10. A two-digit number is obtained by either multiplying the sum of the digits by 8 and then subtracting 5 or by multiplying the difference of the digits by 16 and then adding 3. Find the number.