



QUESTION BANK: GRADE: 9

SUBJECT: MATHEMATICS

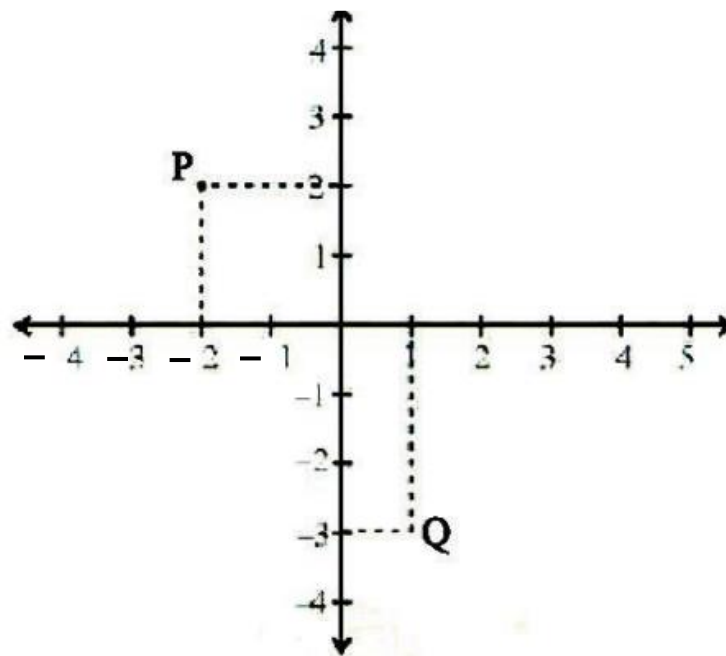
CHAPTER 4: LINEAR EQUATIONS IN TWO VARIABLES

A. Choose the correct answer

- A linear equation in two variables has
(a) no solution (b) only one solution (c) only two solutions (d) infinitely many solutions
- The equation of x – axis is
(a) $a = 0$ (b) $y = 0$ (c) $x = 0$ (d) $y = k$
- Which of the following is not a linear equation in two variables?
(a) $ax + by = c$ (b) $ax^2 + by = c$ (c) $2x + 3y = 5$ (d) $3x + 2y = 6$
- In graphical representation of $y = -4$, line is:
(a) parallel to x – axis (b) parallel to y – axis
(c) passes through origin (d) None of these.
- How many linear equation in x and y can be satisfied by $x = 1$ and $y = 2$?
(a) only one (b) two (c) infinitely many (d) three
- The ordered pair (m, n) satisfies the equation $ax + by + c = 0$ if
(a) $am + bn = 0$ (b) $c = 0$ (c) $am + bn + c = 0$ (d) $am + bn - c = 0$
- The point of the form (a, -a) always lies on:
(a) $x = a$ (b) $y = -a$ (c) $y = x$ (d) $x + y = 0$
- The graph of the $y = x$ passes through the point
(a) $\left(\frac{3}{2}, -\frac{3}{2}\right)$ (b) $\left(0, \frac{3}{2}\right)$ (c) (1, 1) (d) $\left(-\frac{1}{2}, \frac{1}{2}\right)$
- The graph of the linear equation $2x + 3y = 6$ cuts the y-axis at the point
(a) (2, 0) (b) (0, 3) (c) (3, 0) (d) (0, 2)
- If a linear equation has solutions (-2, 2), (0, 0) and (2, -2), then its is of the form
(a) $y - x = 0$ (b) $x + y = 0$ (c) $-2x + y = 0$ (d) $-x + 2y = 0$

B. Following questions carry 2 marks each.

1. Find the value of k , if $x = 2, y = 1$ is a solution of the equation $2x + 3y = k$.
2. Find the points where the graph of the equation $3x + 4y = 12$ cuts the x -axis and the y -axis.
3. If the point $(3, 4)$ lies on the graph of $3y = ax + 7$, then find the value of a .
4. In the given figure, on the sides the respective coordinates of points P and Q respectively are:



5. Find the solution of the linear equation $x + 2y = 8$ which represents a point on (i) x -axis (ii) y -axis

ANSWER KEY:

A 1 d 2 b 3 b 4 a 5 c 6 c 7 d 8 c 9 d 10 b

B 1 k = 7

2 (4,0), (0,3)

3. 5/3 4. P(-2, 2) Q(1, -3) 5. (8,0), (0,4)