

Tender Heart High School, Sec. 33B, Chd.

Class : 9<sup>th</sup>

Date : 17-02-2025

Subject : Mathematics

Teacher : Ms. Reena

## Topic : Co-ordinate Geometry

Ques 1 Find the value of 'a', if the distance between the points  $A(-3, -14)$  and  $B(a, -5)$  is 9 units.

[Ans. -3]

Ques 2 Find the point on the x-axis which is equidistant from the points  $(2, -5)$  and  $(2, 9)$

[Ans. (-7, 0)]

Ques 3 If  $Q(0, 1)$  is equidistant from  $P(5, -3)$  and  $R(x, 6)$ , find the values of  $x$

[Ans.  $\pm 4$ ]

Ques 4 Show that the points  $A(1, 1)$ ,  $B(-1, -1)$  and  $C(-\sqrt{3}, \sqrt{3})$  form an equilateral triangle.

Ques 5 Show that the points  $(0, -1)$ ,  $(-2, 3)$ ,  $(6, 7)$  and  $(8, 3)$ , taken in order, are the vertices of a rectangle. Also find its area.

[Ans. 40 sq. units]

Ques 6 Use graph paper for this question

(i) Draw the graphs of  $3x - y - 2 = 0$  and  $2x + y - 8 = 0$

Take 1cm=1 unit on both axes and plot three points per line.

(ii) Write down the coordinates of the point of intersection.