Bal Bharati PUBLIC SCHOOL
RGPPL RATNAGIRI

ACADEMIC YEAR 2022-23

Grade: X

Subject: MATHEMATICS

CH – 7 – COORDINATE GEOMETRY - ASSIGNMENT -1

1 The perpendicular distance of A(5, 12) from the y axis is

(A) 13 units (B) 5 units (C) 12 units (D) 17 units

2 If the points A(2, 3), B(5, k) and C(6, 7) are collinear, then the value of k is

(a) 4 (b) 6 (c) $\frac{-3}{2}$ (d) $\frac{11}{4}$

3 Two vertices of ΔABC are A(–1, 4) and B(5, 2) and its centroid is G(0, –3). The coordinate of C is

(a) (4, 3) (b) (4, 15) (c) (–4, –15) (d) (–15, –4)

4 Find the value of x, if the distance between the points $(x, -1)$ and $(3, -2)$ is $x+5$.

5 Show that the point P $(-4, 2)$ lies on the line segment joining the points A $(-4, 6)$ and B $(-4, -6)$.

6 If the point C $(-1, 2)$ divides internally the line segment joining A $(2, 5)$ and B (x, y) in the ratio 3 : 4, then find the coordinates of B.

7 In what ratio is the line segment joining the points P $(-2, -3)$ and Q $(3, 7)$ divided by the y-axis ?

8 Show that the points $(-4, 0)$, $(4, 0)$ and $(0, 3)$ are vertices of an isosceles triangle.

9 Find the value of x, if the distance between the points $(x, -1)$ and $(3, -2)$ is $x+5$.

10 Show that the points $(7, 3)$, $(3, 0)$, $(0, -4)$ and $(4, -1)$ are the vertices of a rhombus.

11 Show that the points $(a, b+c)$, $(b, c+a)$ and $(c, a+b)$ are collinear.

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