

Date: 15/11/2021 Subject: Mathematics Topic : Coordinate Geometry

Class: X

- 1. Find the point (x,y) that divides the join of A(3,6) and B(7,10) in the ratio 3:1
  - **A.** (8,9).
  - **B.** (4,5)
  - **C**. (6,9)
  - D. None of these
- 2. C is the mid-point of PQ. If P is (4, x), C is (y, -1) and Q is (-2, 4), then x and y respectively are \_\_\_\_\_.
  - A. 6 and 1
  - **B.** -6 and 2
  - **C.** 6 and -1
  - **D.** 6 and -2
- 3. Find the point that divides A(2, 4) and B(6, 8) in the ratio a : 1.

Α.	$\left(\frac{6a+1}{a+1}, \frac{8a+4}{a+1}\right)$
В.	$\left(\frac{6a+2}{a+1}, \frac{8a+4}{a+1}\right)$
C.	$\left(\frac{6+2a}{a+1},\frac{8+4a}{a+1}\right)$
D.	$(rac{6a+8}{a+1},rac{2a+4}{a+1})$



- 4. If the distance between the points (4, p) and (1, 0) is 5, then p=\_\_\_\_
  - A.  $\pm 4$
  - B.  $\pm 2$
  - C.  $\pm 2\sqrt{2}$
  - D.  $\pm 4\sqrt{2}$

5. The distance between the points (5, 5) and (3, 3) is \_

- **A.** 2 *units*
- **B.**  $2\sqrt{2}$  units
- **C.**  $\sqrt{2}$  units
- **D.**  $8\sqrt{2}$  units
- 6. The distance of the point (-2, -2) from the origin is \_\_\_\_\_units.
  - **A.**  $\sqrt{9}$  **B.**  $2\sqrt{2}$  **C.** 8**D.**  $\sqrt{2}$
- 7. P is the point on the y-axis which is equidistant from A(-5,-2) and B(3, 2), then PA =  $\_$  cm.
  - **A**. 2
  - **B**. 6
  - **C**. 3
  - **D**. 5



8. The ratio in which the line segment PQ, where P (-5, 2) and Q (2, 3), is divided by the y-axis is

- **A.** 6:5
- **B.** 3:5
- **C.** 7:2
- **D.** 5:2
- 9. Determine the ratio in which the graph of the equation 3x + y = 9 divides line segment joining the points A (2,7) and B (1,3).

**A.**  $\frac{4}{3}$  **B.**  $\frac{2}{3}$  **C.**  $\frac{1}{3}$ **D.**  $\frac{3}{4}$ 

- 10. If Point P (-4,6) divides the line segment AB with A(-6,10) and B(x,y) in the ratio 3:2, find the co-ordinates of B.
  - **A.**  $\left(\frac{11}{3}, \frac{14}{3}\right)$  **B.**  $\left(\frac{8}{3}, \frac{-10}{3}\right)$  **C.**  $\left(\frac{-8}{3}, \frac{10}{3}\right)$ **D.**  $\left(\frac{-16}{3}, \frac{8}{3}\right)$



<sup>11.</sup> The point on the x-axis which is equidistant from (2, -5) and (-2, 9) is

- **A.** (-2, 0)
- **B.** (2, 0)
- **C.** (-7, 0)
- **D.** (7, 0)
- 12.

If A (-2, -1), B (a, 0), C (4, b) and D (1, 2) are the vertices of a parallelogram, find the values of a and b.

- **A.** a = 1 and b = 3
- **B.** a = 2 and b = 3
- **C.** a = 1 and b = 1
- **D.** a = 1 and b = 4
- 13. If the points A(1, 2), B(4, 3), C(1, 0) and D(p, -1) are the vertices of a parallelogram then, find the value of p.
  - **A**. 3
  - **B**. -2
  - **C**. 4
  - **D**. 0



14. A(3,6) P(4,-3) B(5,m) In the given figure, P is the Midpoint of AB. Find the value of m. A. -10B. -1C. -6D. -12

<sup>15.</sup> The distance between A (1, 3) and B (x, 7) is 5. The value of x if x > 0 is :

A. 4
B. 2
C. 1
D. 3



16. In a classroom, 4 friends are seated at the points A, B, C and D as shown in the following figure. The point A(3, 4), B(6, 7), C(9, 4) and D(6, 1) taken in order form the vertices of \_\_\_\_\_



2.amazonaws.com/infinitestudentimages/ckeditor\_assets/pictures/10467/content\_31.jpg)

- A. Square
- B. Rectangle
- C. Rhombus
- **D.** Rhombus
- 17. From the figure, find the ratio in which the line segment joining the points A(3, 4) and C(9, 4) is divided by x = 5.
  - **A.** 1:1
  - **B.** 2:1
  - **C.** 1:2
  - **D.** 3:1



18. From the figure, the distance between the points A(3, 4) and C(9, 4) is

- **A**. 3
- **B**. 4
- **C**. 5
- **D**. 6

19. Mid-point of the line-segment joining the points A(3, 4) and C(9, 4) is:

- **A.** (3, 6)
- **B.** (4, 3)
- **C.** (6, 4)
- **D.** (4, 6)
- 20. From the figure, find the ratio in which the line segment joining the points B(6, 7) and D(6, 1) is divided by y = 4.
  - **A.** 1:1
  - **B.** 1:2
  - **C.** 2:1
  - **D.** 3:2