

CHAPTER-7
COORDINATE GEOMETRY

EXERCISE - 7.1

1. The distance of the point $\mathbf{P}(2, 3)$ from the x-axis is
 - (a) 2
 - (b) 3
 - (c) 1
 - (d) 5
2. The distance between the points $\mathbf{A}(0, 6)$ and $\mathbf{B}(0, -2)$ is
 - (a) 6
 - (b) 8
 - (c) 4
 - (d) 2
3. The distance of the point $\mathbf{P}(-6, 8)$ from the origin is
 - (a) 8
 - (b) $2\sqrt{7}$
 - (c) 10
 - (d) 6
4. The distance between the points $(0, 5)$ and $(-5, 0)$ is
 - (a) 5
 - (b) 5
 - (c) 5
 - (d) 10
5. \mathbf{AOBC} is a rectangle whose three vertices are vertices $\mathbf{A}(0, 3)$, $\mathbf{O}(0, 0)$ and $\mathbf{B}(5, 0)$.
The length of its diagonal is

- (a) 5
 - (b) 3
 - (c) 34
 - (d) 4
6. The perimeter of a triangle with vertices $(0, 4)$, $(0, 0)$ and $(3, 0)$ is
- (a) 5
 - (b) 12
 - (c) 11
 - (d) 7
7. The area of a triangle with vertices $\mathbf{A}(3, 0)$, $\mathbf{B}(7, 0)$ and $\mathbf{C}(8, 4)$ is
- (a) 14
 - (b) 28
 - (c) 8
 - (d) 6
8. The points $(-4, 0)$, $(4, 0)$, $(0, 3)$ are the vertices of
- (a) right triangle
 - (b) isosceles triangle
 - (c) equilateral triangle
 - (d) scalent triangle
9. The point which divides the line segment joining the points $\mathbf{P}(7, -6)$ and $(3, 4)$ in ratio $1 : 2$ internally lies in the
- (a) I quadrant
 - (b) II quadrant
 - (c) III quadrant
 - (d) IV quadrant
10. The point which lies on the perpendicular bisector of the line segment joining the points $\mathbf{A}(-2, -5)$ and $\mathbf{B}(2, 5)$ is

- (a) $(0, 0)$
 - (b) $(0, 2)$
 - (c) $(2, 0)$
 - (d) $(-2, 0)$
11. The fourth vertex **D** of a parallelogram **ABCD** whose three vertices are **A** $(-2, 3)$, **B** $(6, 7)$ and **C** $(8, 3)$ is
- (a) $(0, 1)$
 - (b) $(0, -1)$
 - (c) $(-1, 0)$
 - (d) $(1, 0)$
12. If the point **P** $(2, 1)$ lies on the line segment joining points **A** $(4, 2)$ and **B** $(8, 4)$, then
- (a) $\mathbf{AP} = \frac{1}{3}\mathbf{AB}$
 - (b) $\mathbf{AP} = \mathbf{PE}$
 - (c) $\mathbf{PB} = \frac{1}{3}\mathbf{AB}$
 - (d) $\mathbf{AP} = \frac{1}{2}\mathbf{AB}$
13. If $\mathbf{P} \frac{a}{3}$ is the mid-point of the line segment joining the points **Q** $(-6, 5)$ and $(-2, 3)$, then the value of a is
- (a) -4
 - (b) -12
 - (c) 12
 - (d) -6
14. The perpendicular bisector of the line segment joining the points **A** $(1, 5)$ and **B** $(4, 6)$ cuts the y-axis at
- (a) $(0, 13)$
 - (b) $(0, -13)$
 - (c) $(0, 12)$

- (d) $(13, 0)$
15. The coordinates of the point which is equidistant from the three vertices of the **AOB** as shown in the Fig. 7.1 is
- (a) (x, y)
 (b) (y, x)
 (c) $(\frac{x}{2}, \frac{y}{2})$
 (d) $(\frac{y}{2}, \frac{x}{2})$
16. A circle drawn with origin as the centre passes through $(\frac{13}{2}, 0)$. The point which does not lie in the interior of the circle is
- (a) $(\frac{-3}{4}, 1)$
 (b) $(2, \frac{7}{3})$
 (c) $(5, \frac{-1}{2})$
 (d) $(-6, \frac{-5}{2})$
17. A line intersects the y-axis and x-axis of the points **P** and **Q**, respectively. If $(2, 5)$ is the mid-point of **PQ**, then the coordinates of **P** and **Q** are, respectively
- (a) $(0, -5)$ and $(2, 0)$
 (b) $(0, -10)$ and $(-4, 0)$
 (c) $(0, 4)$ and $(-10, 0)$
 (d) $(0, -10)$ and $(4, 0)$
18. The area of a triangle with vertices
- (a) $a+b+c$
 (b) 0
 (c) $a+b+c$
 (d) abc
19. If the distance between the points $(4, P)$ and $(1, 0)$ is 5, then the value of **P** is
- (a) 4 only

- (b) $+4$
- (c) -4
- (d) 0

20. If the points $\mathbf{A}(1, 2)$, $\mathbf{O}(0, 0)$ and $\mathbf{C}(a, b)$ are collinear, then

- (a) $a=b$
- (b) $a=2b$
- (c) $2a=b$
- (d) $a=-b$

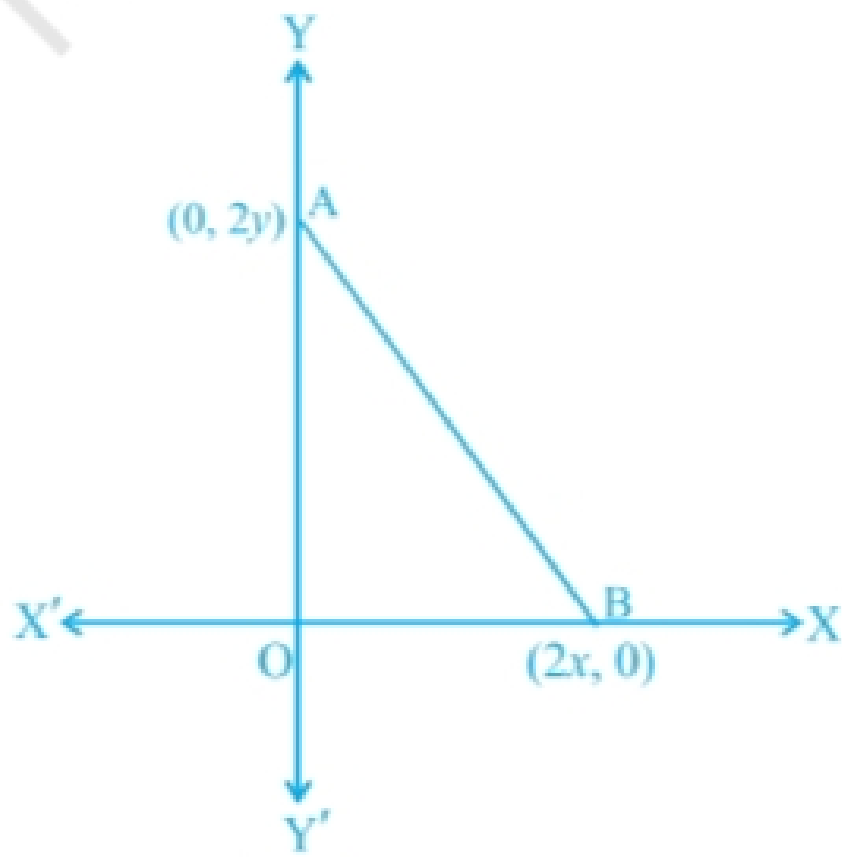


Fig. 7.1

Figure 1