



1. Find the points on x-axis, which are at a distance of 13 units from the point (7, 7)

- (i) $((7+2\sqrt{30}), 0), ((7-2\sqrt{30}), 0)$ (ii) $((8+2\sqrt{30}), (-1)), ((7-2\sqrt{30}), 0)$ (iii) $((9+2\sqrt{30}), 2), ((7-2\sqrt{30}), 0)$
 (iv) $((7+2\sqrt{30}), 0), ((6-2\sqrt{30}), 1)$ (v) $((5+2\sqrt{30}), (-2)), ((7-2\sqrt{30}), 0)$

2. Find the points on y-axis, which are at a distance of 4 units from the point (4, 1)

- (i) $((-1), 2)$ (ii) $(1, 0)$ (iii) $((-2), (-1))$ (iv) $(2, 3)$ (v) $(0, 1)$

3. Find the relation between x and y such that the point P(x, y) is equidistant from points $((-7), 7)$ and $(6, (-8))$

- (i) $(-14x+15y+1)=0$ (ii) $(-3x-6y+21)=0$ (iii) $(-13x+18y+1)=0$ (iv) $(-13x+15y+1)=0$
 (v) $(-3x-8y+21)=0$

4. The mid-point of the join of the points (x_1, y_1) and (x_2, y_2) is

- (i) $(\frac{x_1-x_2}{3}, \frac{y_1-y_2}{3})$ (ii) $(\frac{y_1-y_2}{2}, \frac{x_1-x_2}{2})$ (iii) $(\frac{x_1+x_2}{3}, \frac{y_1+y_2}{3})$ (iv) $(\frac{x_1-x_2}{2}, \frac{y_1-y_2}{2})$
 (v) $(\frac{x_1+x_2}{2}, \frac{y_1+y_2}{2})$

5. Find the point that divides the join of points $((-5), (-3))$ and $(0, 0)$ internally in the ratio 8:1

- (i) $((-\frac{23}{9}), (-\frac{7}{3}))$ (ii) $(\frac{4}{9}, (-\frac{4}{3}))$ (iii) $(\frac{13}{9}, \frac{5}{3})$ (iv) $((-\frac{14}{9}), \frac{2}{3})$ (v) $((-\frac{5}{9}), (-\frac{1}{3}))$

6. Find the point that bisects $(4, (-7))$ and $(2, 0)$

- (i) $(2, (-\frac{5}{2}))$ (ii) $(5, (-\frac{3}{2}))$ (iii) $(4, (-\frac{9}{2}))$ (iv) $(1, (-\frac{11}{2}))$ (v) $(3, (-\frac{7}{2}))$

7. In what ratio is the join of $(2, (-3))$ and $((-2), 2)$ divided by the line $(-y)=0$?

- (i) 2:2 (ii) 3:2 (iii) 3:-1 (iv) 4:2 (v) 3:5

8. $(6, 7)$, $(4, 8)$ and $(1, 0)$ are the vertices of triangle ABC.

Find the equation of the median of the triangle through vertex C

- (i) $(-\frac{15}{2}x+6y+\frac{15}{2})=0$ (ii) $(\frac{9}{2}x-\frac{1}{2}y-14)=0$ (iii) $(-\frac{15}{2}x+4y+\frac{15}{2})=0$ (iv) $(3x-\frac{7}{2}y+\frac{13}{2})=0$
 (v) $(-\frac{15}{2}x+y+\frac{15}{2})=0$

9. The points $((-4), 5)$, $((-4), 4)$ and $(\frac{1}{2}\sqrt{3}-4, \frac{9}{2})$ represent

- (i) scalene triangle (ii) right angled triangle (iii) isosceles triangle (iv) equilateral triangle

10. In what ratio is the join of $(4,4)$ and $((-7),4)$ divided by y-axis?

- (i) 5:6 (ii) 4:7 (iii) 4:9 (iv) 4:5 (v) 7:6

11. A point lies on negative side of y-axis at a distance of 8 units from x-axis. What are the coordinates of the point?

- (i) $((-8),0)$ (ii) $(0,(-8))$ (iii) $(8,0)$ (iv) $(0,8)$

12. Find the centre of the circle, the endpoints of whose diameter are $(0,4)$ and $((-5),8)$

- (i) $((-\frac{5}{2}),6)$ (ii) $(\frac{5}{2},6)$ (iii) $((-\frac{5}{2}),(-6))$ (iv) $(\frac{5}{2},(-6))$ (v) $(6,(-\frac{5}{2}))$

13. The centre of a circle is $(\frac{5}{2},(-\frac{9}{2}))$. Find the other end of the diameter whose one end point is $(2,(-5))$

- (i) $((-4),3)$ (ii) $((-3),(-4))$ (iii) $(3,(-4))$ (iv) $((-3),4)$ (v) $(3,4)$

14. The line $(12x+10y-93)=0$ bisects which of the following pairs of points?

- (i) $(8,6),(1,2)$ (ii) $(9,9),(1,2)$ (iii) $(7,7),(0,3)$ (iv) $(5,5),(1,2)$ (v) $(7,7),(1,2)$

15. If the point $((-\frac{1}{9}),\frac{26}{9})$ divides the join of points $(0,3)$ and (x,y) in the ratio 1:8, find (x,y)

- (i) $(0,1)$ (ii) $((-3),0)$ (iii) $((-1),2)$ (iv) $((-2),3)$ (v) $(1,4)$

16. In what ratio is the join of $((-9),3)$ and $(5,(-7))$ divided by the line $(x-2)=0$?

- (i) 12:3 (ii) 11:3 (iii) 10:3 (iv) 11:1 (v) 11:5

17. Find the point on x-axis which is equidistant from the points $(8,0)$ and $(9,(-5))$

- (i) $(23,2)$ (ii) $(21,0)$ (iii) $(20,1)$ (iv) $(22,(-1))$ (v) $(19,(-2))$

18. The points $((-1),(-3)),(2,1)$ and $(6,(-2))$ represent

- (i) equilateral triangle (ii) right angle triangle (iii) isosceles right angled triangle (iv) scalene triangle
(v) collinear points

19. Find the perimeter of the triangle formed by the points $((-2),3),((-4),2)$ and $(5,(-3))$

- (i) $(\sqrt{5}+\sqrt{106}+\sqrt{85})$ (ii) $(\sqrt{5}+\sqrt{104}+\sqrt{85})$ (iii) $(\sqrt{5}+\sqrt{109}+\sqrt{85})$ (iv) $(\sqrt{5}+\sqrt{106}+85)$
(v) $(\sqrt{5}+\sqrt{106}+\sqrt{85})$

20. Find the distance between the points $(8,(-5))$ and $(4,4)$

- (i) 97 (ii) $\sqrt[4]{97}$ (iii) $\sqrt{97}$ (iv) $\sqrt{100}$ (v) $\sqrt{94}$

21. Find the coordinates of the mid points of the sides of the triangle formed by $(6,1),(1,(-7))$ and $((-1),7)$

- (i) $(\frac{7}{2},(-3)),(0,0),(\frac{5}{2},4)$ (ii) $(\frac{5}{2},(-2)),(0,0),(\frac{5}{2},4)$ (iii) $(\frac{7}{2},(-3)),(0,0),(\frac{1}{2},2)$ (iv) $(\frac{7}{2},(-3)),(0,0),(\frac{7}{2},3)$
(v) $(\frac{7}{2},(-3)),(2,2),(\frac{5}{2},4)$

22. KM is the straight line of length $2\sqrt{5}$ units. If K has the coordinates $(8, -6)$ and M has coordinates $(k, -2)$, find the possible values of k
- (i) $(10, 6)$ (ii) $(9, 7)$ (iii) $(11, 5)$ (iv) $(12, 8)$ (v) $(8, 4)$

23. Find the distance of the point $(-1, 1)$ from origin

(i) $\sqrt{2}$ (ii) 2 (iii) $\sqrt{-1}$ (iv) $\sqrt{5}$ (v) $\frac{4}{\sqrt{2}}$

24. A point lies on positive side of x-axis at a distance of 9 units from y-axis. What are the coordinates of the point?

(i) $(9, 0)$ (ii) $(0, 9)$ (iii) $(0, -9)$ (iv) $(-9, 0)$

25. Distance of the point $(3, 9)$ from y-axis is

(i) 6 (ii) -6 (iii) 9 (iv) 3 (v) 12

Assignment Key

1) (i)	2) (v)	3) (iv)	4) (v)	5) (v)	6) (v)
7) (ii)	8) (iii)	9) (iv)	10) (ii)	11) (ii)	12) (i)
13) (iii)	14) (v)	15) (iii)	16) (ii)	17) (ii)	18) (iii)
19) (v)	20) (iii)	21) (i)	22) (i)	23) (i)	24) (i)
25) (iv)					