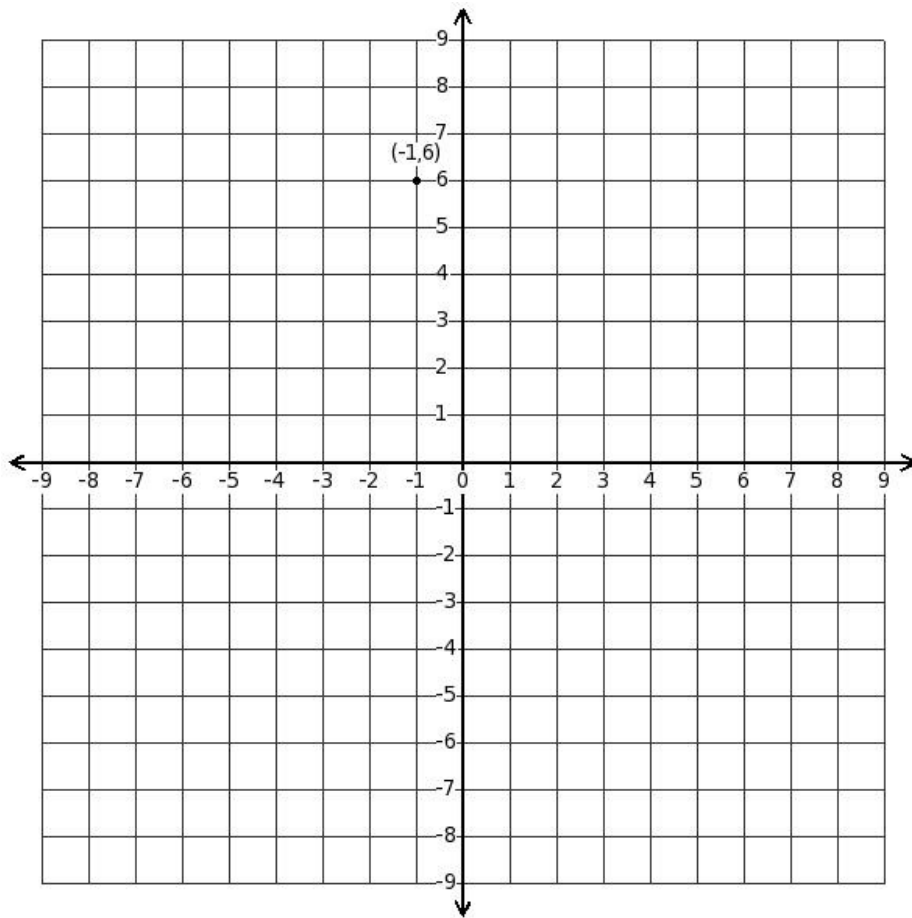




1. If point $P((-5), 4)$ is equidistant from the points $(a, 5)$ and $((-6), (-7))$, find a
(i) 6 (ii) 3 (iii) 8 (iv) 5 (v) 7

2. A point lies on positive side of y-axis at a distance of 9 units from x-axis. What are the coordinates of the point?
(i) $(9, 0)$ (ii) $(0, 9)$ (iii) $(0, (-9))$ (iv) $((-9), 0)$

3. Distance of the given point from y-axis is



- (i) 1 (ii) -5 (iii) 6 (iv) 7
4. The mid-point of the join of points $((-4), 3)$ and $(7, (-3))$ is
(i) $(\frac{7}{2}, 2)$ (ii) $(\frac{1}{2}, 1)$ (iii) $(\frac{3}{2}, 0)$ (iv) $((-\frac{1}{2}), (-2))$ (v) $(\frac{5}{2}, (-1))$
5. Distance of the point $(4, 3)$ from x-axis is
(i) 7 (ii) (-1) (iii) 4 (iv) 3 (v) 1
6. Find the coordinates of the mid points of the sides of the triangle formed by $(2, 7)$, $(0, (-2))$ and $(0, (-6))$
(i) $(1, \frac{5}{2})$, $(0, (-4))$, $(2, (-\frac{1}{2}))$ (ii) $(1, \frac{5}{2})$, $(0, (-4))$, $(1, \frac{1}{2})$ (iii) $(1, \frac{5}{2})$, $(0, (-4))$, $((-1), (-\frac{3}{2}))$
(iv) $(1, \frac{5}{2})$, $(2, (-2))$, $(1, \frac{1}{2})$ (v) $(0, \frac{7}{2})$, $(0, (-4))$, $(1, \frac{1}{2})$

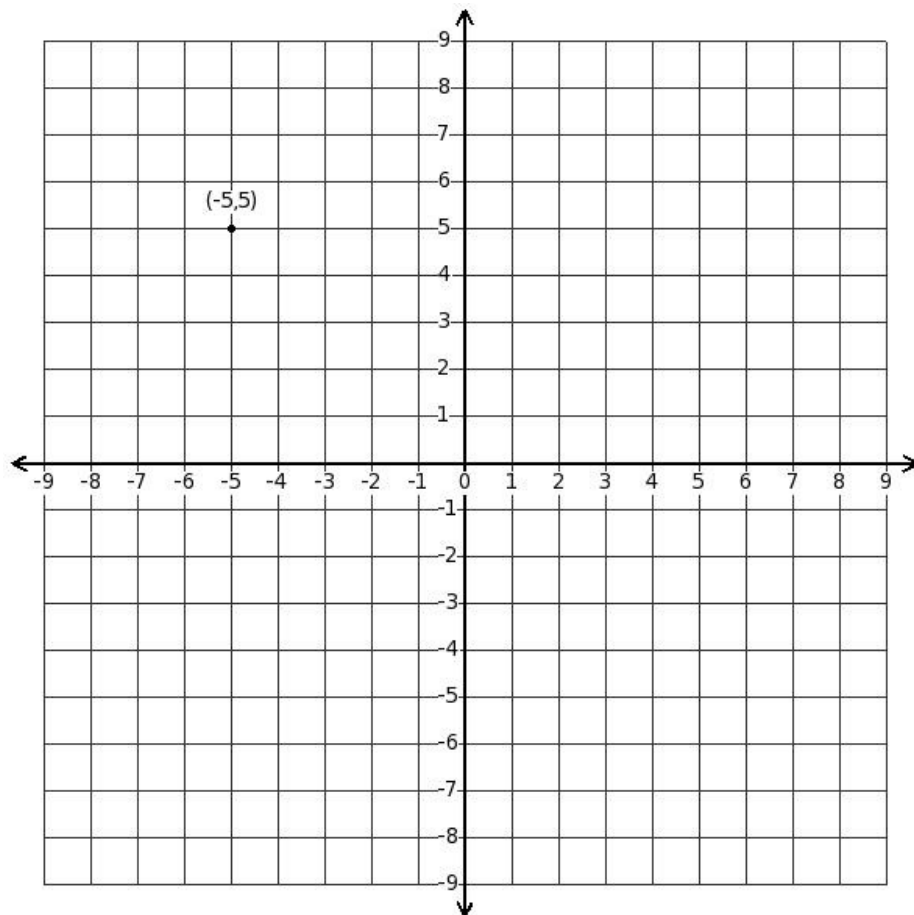
7. $(0,(-3)), (7,2)$ and $(6,(-4))$ are the vertices of triangle ABC.

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

(i) $(-2x + \frac{13}{2}y + \frac{39}{2}) = 0$ (ii) $(-\frac{7}{2}x - \frac{5}{2}y + 11) = 0$ (iii) $(\frac{11}{2}x - 4y - \frac{61}{2}) = 0$ (iv) $(-\frac{7}{2}x - \frac{3}{2}y + 11) = 0$

(v) $(-\frac{7}{2}x - \frac{7}{2}y + 11) = 0$

8. Distance of the given point from x-axis is



(i) 25 (ii) 10 (iii) 5 (iv) 0

9. Find the points on y-axis, which are at a distance of 5 units from the point $((-3), (-8))$

(i) $(2, (-2)), (0, (-12))$ (ii) $(0, (-4)), ((-1), (-11))$ (iii) $((-2), (-6)), (0, (-12))$ (iv) $(0, (-4)), (0, (-12))$
(v) $(1, (-5)), (0, (-12))$

10. Find the points on x-axis, which are at a distance of 8 units from the point $(6, 2)$

(i) $((8 + 2\sqrt{15}), 2), ((6 - 2\sqrt{15}), 0)$ (ii) $((7 + 2\sqrt{15}), (-1)), ((6 - 2\sqrt{15}), 0)$ (iii) $((6 + 2\sqrt{15}), 0), ((5 - 2\sqrt{15}), 1)$
(iv) $((6 + 2\sqrt{15}), 0), ((6 - 2\sqrt{15}), 0)$ (v) $((4 + 2\sqrt{15}), (-2)), ((6 - 2\sqrt{15}), 0)$

11. Find the point that divides the join of points $(7, 7)$ and $(6, (-8))$ internally in the ratio 4:9

(i) $(\frac{61}{13}, \frac{5}{13})$ (ii) $(\frac{100}{13}, \frac{18}{13})$ (iii) $(\frac{74}{13}, \frac{44}{13})$ (iv) $(\frac{113}{13}, \frac{57}{13})$ (v) $(\frac{87}{13}, \frac{31}{13})$

12. The points $((-6), (-4)), (0, (-4)), (0, 1)$ and $((-6), 1)$ represents

(i) parallelogram (ii) square (iii) rectangle (iv) rhombus (v) trapezium

13. Find the value of k such that the points $((-9), 6), ((-1), \frac{86}{17})$ and $(k, 4)$ are collinear

- (i) 7 (ii) 9 (iii) 11 (iv) 8 (v) 6

14. Find the distance between the points $(4, 8)$ and $(7, 5)$

- (i) $3\sqrt{5}$ (ii) 6 (iii) $3\sqrt{2}$ (iv) $3\sqrt{2}$ (v) $3\sqrt{\frac{1}{2}}$

15. The coordinates of the point dividing the join of points (x_1, y_1) and (x_2, y_2) internally in the ratio $m:n$ are

- (i) $(\frac{nx_2 - mx_1}{m - n}, \frac{ny_2 - my_1}{m - n})$ (ii) $(\frac{nx_2 + mx_1}{m + n}, \frac{ny_2 + my_1}{m + n})$ (iii) $(\frac{mx_2 + nx_1}{m + n}, \frac{my_2 + ny_1}{m + n})$
(iv) $(\frac{mx_2 - nx_1}{m - n}, \frac{my_2 - ny_1}{m - n})$

16. Find the relation between x and y such that the point $P(x, y)$ is equidistant from points $(8, 0)$ and $(3, 7)$

- (i) $(-5x + 7y + 3) = 0$ (ii) $(-5x + 3y + 40) = 0$ (iii) $(-5x + 9y + 3) = 0$ (iv) $(-6x + 7y + 3) = 0$
(v) $(-5x + 40) = 0$

17. The points $(8, (-7)), ((-8), 7)$ and $(\frac{88}{21}, (-\frac{11}{3}))$ represents

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

18. Find the centre of the circle, the endpoints of whose diameter are $((-5), (-7))$ and $(4, 1)$

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

19. The points $(7, 7), (1, (-3))$ and $((-\frac{7}{2}), \frac{13}{2})$ represent

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

20. Which of the following sets of points are collinear?

- (i) $(2, (-3)), ((-3), 4), (7, (-4))$ (ii) $(3, 6), ((-2), (-8)), (3, (-7))$ (iii) $(4, 6), (1, 8), (6, 2)$
(iv) $(7, (-2)), (8, 1), ((-1), (-5))$ (v) $(2, 6), ((-7), (-6)), ((-\frac{17}{5}), (-\frac{6}{5}))$

21. If the point $((-\frac{8}{15}), (-\frac{82}{15}))$ divides the join of points $(6, (-5))$ and (x, y) in the ratio $7:8$, find (x, y)

- (i) $((-9), (-5))$ (ii) $((-10), (-8))$ (iii) $((-8), (-6))$ (iv) $((-7), (-7))$ (v) $((-6), (-4))$

22. Find the distance of the point $((-7), 7)$ from origin

- (i) $7\sqrt{2}$ (ii) $7\sqrt{2}$ (iii) $7\sqrt{-1}$ (iv) $7\sqrt{5}$ (v) 14

23. Find the area of the triangle formed by the points $((-1), (-6)), ((-2), 6)$ and $((-6), (-3))$

- (i) $\frac{59}{2}$ (ii) 29 (iii) $\frac{113}{4}$ (iv) $\frac{55}{2}$ (v) $\frac{57}{2}$

24. Find the relation between x and y if the points (x, y) , $(-3, 4)$ and $(-2, -6)$ are collinear

(i) $(-x + 2y + 13) = 0$ (ii) $(-7x - 10y + 19) = 0$ (iii) $(2x - 7y - 38) = 0$ (iv) $(-10x - y - 26) = 0$

(v) $(3x - 9y - 48) = 0$

25. Three vertices of a parallelogram are $(-6, -5)$, $(2, -5)$ and $(5, 0)$. Find the fourth vertex

(i) $(-1, 2)$ (ii) $(-3, 0)$ (iii) $(-5, -2)$ (iv) $(-2, -1)$ (v) $(-4, 1)$

Assignment Key

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