



1. The points $(-3, -1)$, $(3, -1)$, $(6, 2)$ and $(0, 2)$ represent
(i) rectangle (ii) square (iii) rhombus (iv) trapezium (v) parallelogram

2. The centroid of the triangle formed by the points (x_1, y_1) , (x_2, y_2) and (x_3, y_3) is

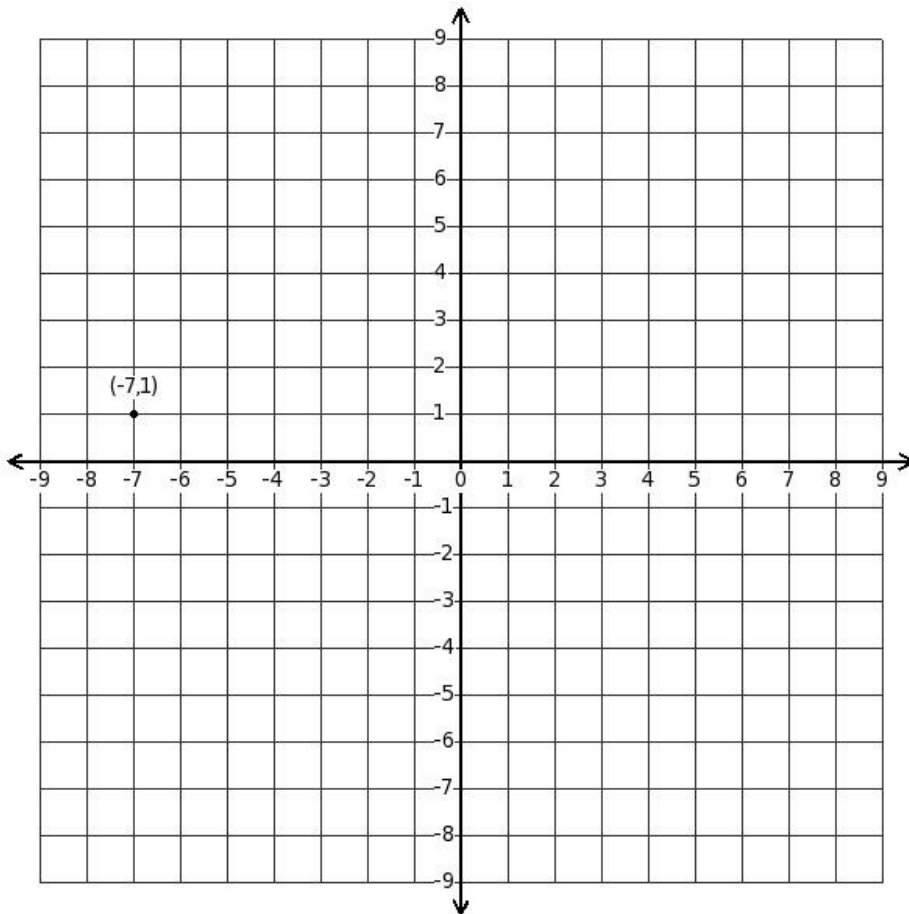
(i) $(\frac{x_1 - x_2 - x_3}{2}, \frac{y_1 - y_2 - y_3}{2})$ (ii) $(\frac{x_1 - x_2 - x_3}{3}, \frac{y_1 - y_2 - y_3}{3})$ (iii) $(\frac{x_1 + x_2 + x_3}{3}, \frac{y_1 + y_2 + y_3}{3})$

(iv) $(\frac{y_1 - y_2 - y_3}{2}, \frac{x_1 - x_2 - x_3}{2})$ (v) $(\frac{y_1 + y_2 + y_3}{2}, \frac{x_1 + x_2 + x_3}{2})$

3. If point $P(x, 4)$ is equidistant from the points $(0, -7)$ and $(4, 6)$, find x

(i) $(\frac{-77}{6})$ (ii) $(\frac{-25}{2})$ (iii) $(\frac{-101}{8})$ (iv) $(\frac{-99}{8})$ (v) $(\frac{-103}{8})$

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



- (i) -6 (ii) 1 (iii) 7 (iv) 8

5. A is a point on x-axis with abscissa (-8) and B is a point on y-axis with ordinate (-5) . Find the distance between A and B

(i) $\sqrt{92}$ (ii) $\sqrt[4]{89}$ (iii) 89 (iv) $\sqrt{89}$ (v) $\sqrt{87}$

6. A and B are two points on the x-axis and y-axis respectively. If $(-2, 5)$ is the mid-point of the join of A and B, find A and B
- (i) $(-3, -1), (0, 10)$ (ii) $(-4, 0), (0, 10)$ (iii) $(-4, 0), (-1, 11)$ (iv) $(-6, -2), (0, 10)$
(v) $(-2, 2), (0, 10)$
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7. The points $(-5, -1), (3, -1)$ and $(3, 3)$ represent
- (i) scalene triangle (ii) right angle triangle (iii) equilateral triangle (iv) isosceles right angled triangle
(v) collinear points
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8. In what ratio is the join of $(9, 3)$ and $(-9, -7)$ divided by y-axis?
- (i) 3:1 (ii) 5:1 (iii) 9:9 (iv) 9:6 (v) 9:11
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9. A point lies on negative side of y-axis at a distance of 2 units from x-axis. What are the coordinates of the point?
- (i) $(2, 0)$ (ii) $(-2, 0)$ (iii) $(0, 2)$ (iv) $(0, -2)$
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10. The points $(0, 2), (1, 7)$ and $(\frac{1}{2} - \frac{5}{2}\sqrt{3}, \frac{9}{2} + \frac{1}{2}\sqrt{3})$ represent
- (i) scalene triangle (ii) equilateral triangle (iii) isosceles triangle (iv) right angled triangle
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11. Find the points on y-axis, which are at a distance of 10 units from the point $(-8, -2)$
- (i) $(1, 3), (0, -8)$ (ii) $(2, 6), (0, -8)$ (iii) $(-2, 2), (0, -8)$ (iv) $(0, 4), (0, -8)$ (v) $(0, 4), (-1, -7)$
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12. If point $P(\frac{7}{2}, 2)$ bisects A $(2, 5)$ and B (x, y) , find (x, y)
- (i) $(7, 1)$ (ii) $(3, -3)$ (iii) $(6, -2)$ (iv) $(5, -1)$ (v) $(4, 0)$
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13. Find the area of the triangle formed by the points $(6, 2), (1, 8)$ and $(-2, 3)$
- (i) 22 (ii) $\frac{43}{2}$ (iii) $\frac{41}{2}$ (iv) $\frac{45}{2}$ (v) $\frac{85}{4}$
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14. Find the perimeter of the triangle formed by the points $(6, -7), (0, -7)$ and $(8, 0)$
- (i) $(6 + \sqrt{113} + 53)$ (ii) $(6 + \sqrt{111} + \sqrt{53})$ (iii) $(6 + \sqrt{113} + \sqrt[4]{53})$ (iv) $(6 + \sqrt{115} + \sqrt{53})$ (v) $(6 + \sqrt{113} + \sqrt{53})$
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15. Find the points on x-axis, which are at a distance of 10 units from the point $(0, 8)$
- (i) $(6, 0), (-6, 0)$ (ii) $(7, -1), (-6, 0)$ (iii) $(8, 2), (-6, 0)$ (iv) $(6, 0), (-7, 1)$ (v) $(4, -2), (-6, 0)$
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16. Find the centre of the circle passing through the points $(0, -1), (3, 5)$ and $(-8, 3)$
- (i) $(-\frac{5}{2}, 4)$ (ii) $(-\frac{7}{2}, 5)$ (iii) $(-\frac{1}{2}, 6)$ (iv) $(-\frac{9}{2}, 2)$ (v) $(-\frac{3}{2}, 3)$
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17. Distance of the point $(1, 7)$ from x-axis is
- (i) 1 (ii) (-6) (iii) 7 (iv) 6 (v) 8
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18. Find the centroid of the triangle formed by the points $(5, 7), (-4, 3)$ and $(0, 2)$
- (i) $(-\frac{5}{3}, 2)$ (ii) $(-\frac{2}{3}, 5)$ (iii) $(\frac{4}{3}, 3)$ (iv) $(\frac{7}{3}, 6)$ (v) $(\frac{1}{3}, 4)$

19. 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) $(\frac{mx_2 + nx_1}{m + n}, \frac{my_2 + ny_1}{m + n})$

20. Find the coordinates of the circumcentre of the triangle whose vertices are $(-5, -1)$, $(3, 2)$ and $(7, -4)$

(i) $(-\frac{27}{20}, -\frac{59}{10})$ (ii) $(\frac{33}{20}, -\frac{49}{10})$ (iii) $(\frac{53}{20}, -\frac{19}{10})$ (iv) $(-\frac{7}{20}, -\frac{29}{10})$ (v) $(\frac{13}{20}, -\frac{39}{10})$

21. KM is the straight line of length $5\sqrt{5}$ units. If K has the coordinates $(-7, -4)$ and M has coordinates $(k, 6)$, find the possible values of k

(i) $(-3, -11)$ (ii) $(0, -10)$ (iii) $(-1, -13)$ (iv) $(-4, -14)$ (v) $(-2, -12)$

22. The points $(5, 4)$, $(2, -1)$ and $(-1, 1)$ represent

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

23. If point P $(\frac{31}{5}, 3)$ is equidistant from the points $(a, -7)$ and $(-3, 7)$, find a

(i) 6 (ii) 5 (iii) 8 (iv) 7 (v) 10

24. A point lies on positive side of y-axis at a distance of 5 units from x-axis. What are the coordinates of the point?

(i) $(0, 5)$ (ii) $(5, 0)$ (iii) $(0, -5)$ (iv) $(-5, 0)$

25. The points $(-5, -3)$, $(2, -3)$, $(2, 1)$ and $(-5, 1)$ represents

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

Assignment Key

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