

EduSahara™ Learning Center Assignment**Grade : Class X, CBSE****Chapter : Coordinate Geometry****Name : Coordinate Geometry Miscellaneous**

Find the area of the triangle formed by the points

1. $(4, 8)$, $(-2, -4)$ and $(2, 2)$

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

Find the perimeter of the triangle formed by the points

2. $(-3, 2)$, $(-2, -2)$ and $(1, 5)$

(i) $(\sqrt{17} + \sqrt{60} + 5)$ (ii) $(\sqrt{17} + \sqrt{55} + 5)$

(iii) $(\sqrt{17} + \sqrt{58} + 5)$ (iv) $(\sqrt{17} + \sqrt{58} + 6)$

(v) $(\sqrt{17} + \sqrt{58} + 4)$

3. The points $(-2, 4)$, $(-6, 1)$ and $(-4 + \frac{3}{2}\sqrt{3}, (\frac{5}{2} - 2\sqrt{3}))$ represent

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

4. The points $(-5, 8)$, $(0, 7)$ and $(-\frac{18}{5}, 2)$ represent

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

5. The points $(-1, -4)$, $(2, -1)$, $(5, -4)$ and $(2, -7)$ represent

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

6. The points $(-5, -3)$, $(1, -3)$, $(5, 2)$ and $(-1, 2)$ represent

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

square

7. The points $((-6), (-2))$, $(0, (-2))$, $(0, 3)$ and $((-6), 3)$ represents

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

8. The points $((-7), 4)$, $((-3), 8)$ and $((-6), (-4))$ represent

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

9. The points $((-5), (-6))$, $((-1), (-2))$ and $(3, (-6))$ represent

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

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

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

11. The points $((-1), (-5))$, $(6, (-10))$, $(13, (-5))$ and $(6, 0)$ represent

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

12. The points $(5, (-6))$, $((-5), 6)$ and $((-\frac{5}{8}), \frac{3}{4})$ represents

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

Find the value of k such that the points

13. $((-7), (-8))$, $((-\frac{11}{2}), 1)$ and $(k, 4)$ are collinear

- (i) -7 (ii) -4 (iii) -2 (iv) -5 (v) -6

Find the value of k such that the points

14. $((-5), (-6))$, $((-\frac{13}{17}), \frac{18}{17})$ and $(4, k)$ are collinear

- (i) 9 (ii) 12 (iii) 7 (iv) 10 (v) 8

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

- (i) $((-3), (-6)), (7, 2), (6, 0)$
- (ii) $((-7), 3), ((-6), 3), ((-8), (-5))$
- (iii) $(0, 1), (5, (-2)), (\frac{15}{2}, (-\frac{7}{2}))$
- (iv) $(3, (-5)), (7, 3), ((-4), 3)$
- (v) $((-1), (-5)), ((-1), 1), (3, 1)$
-

16. $((-8), (-6)), ((-8), (-1))$ and $(4, 1)$ are the vertices of triangle ABC.
Find the equation of the median of the triangle through vertex C

- (i) $(\frac{9}{2}x - 9y - 6) = 0$ (ii) $(\frac{9}{2}x - 15y - 6) = 0$
- (iii) $(-6x + 6y - 12) = 0$ (iv) $(\frac{3}{2}x + 6y + 18) = 0$
- (v) $(\frac{9}{2}x - 12y - 6) = 0$
-

- Find the area of the quadrilateral formed by
17. $((-6), (-5)), ((-3), (-2)), ((-7), (-1))$ and $((-7), (-2))$
- (i) 9 (ii) 7 (iii) 6 (iv) 11 (v) 8
-

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

- (i) $(-9x + 2y + 28) = 0$
- (ii) $(-9x + 5y + 28) = 0$
- (iii) $(-9x + 2y + 25) = 0$
- (iv) $(-8x + 5y + 25) = 0$
- (v) $(-8x + 2y + 25) = 0$
-

- Find the relation between x and y if the points
19. $(x, y), (2, 1)$ and $((-2), (-5))$ are collinear

- (i) $(7x - 10y - 36) = 0$
- (ii) $(-2x + 3y + 10) = 0$
- (iii) $(x - 6y + 4) = 0$
- (iv) $(-6x + 4y + 8) = 0$
- (v) $(5x - 7y - 25) = 0$

Assignment Key

- 1) (iv)
- 2) (iii)
- 3) (ii)
- 4) (v)
- 5) (i)
- 6) (iii)
- 7) (iv)
- 8) (ii)
- 9) (i)
- 10) (v)
- 11) (iii)
- 12) (ii)
- 13) (iv)
- 14) (i)
- 15) (iii)
- 16) (v)
- 17) (v)
- 18) (v)
- 19) (iv)