EduSahara™ Worksheet

Name : Chapter Based Worksheet

Chapter : Coordinate Geometry

Grade : SSC Grade X

1. The points $((-3),(-5)),(1,(-2)),(4,(-6))$ and $(0,(-9))$ represent

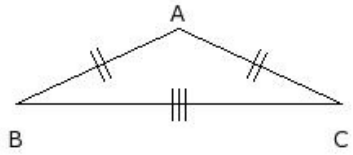
   (i) rhombus (ii) square (iii) rectangle (iv) parallelogram (v) trapezium

2. Find the perimeter of the triangle formed by the points $(7,(-7)),((-4),0)$ and $((-5),7)$

   (i) $(\sqrt{170}+5\sqrt{2}+170)$ (ii) $(\sqrt{170}+5\sqrt{2}+2\sqrt{85})$ (iii) $(\sqrt{170}+5\sqrt{\frac{1}{2}}+2\sqrt{85})$ (iv) $(\sqrt{170}+5\sqrt{2}+2\sqrt[4]{85})$

   (v) $(\sqrt{170}+5\sqrt{5}+2\sqrt{85})$

3. In an isosceles triangle △ABC, if BC = 20 cm, CA = AB and perimeter is 42 cm, then area of the triangle =



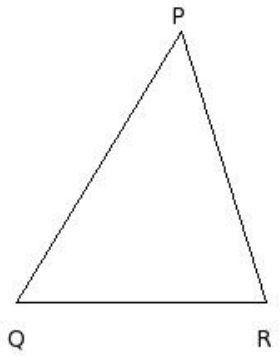
   (i) 48.83 sq.cm (ii) 42.83 sq.cm (iii) 40.83 sq.cm (iv) 45.83 sq.cm (v) 50.83 sq.cm

4. Two vertices of a triangle are $(5,4),((-1),0)$ and its centriod is $(\frac{11}{3},(-\frac{4}{3}))$

   . Find the coordinates of the third vertex of the triangle

   (i) $((-8),7)$ (ii) $(7,(-8))$ (iii) $((-7),8)$ (iv) $(7,8)$ (v) $((-7),(-8))$

5. In △PQR, if QR = 15 cm, RP = 17 cm and perimeter = 51 cm, then area of the triangle =



   (i) 143.63 sq.cm (ii) 106.63 sq.cm (iii) 121.63 sq.cm (iv) 94.63 sq.cm (v) 137.63 sq.cm

6. Which of the following are true?

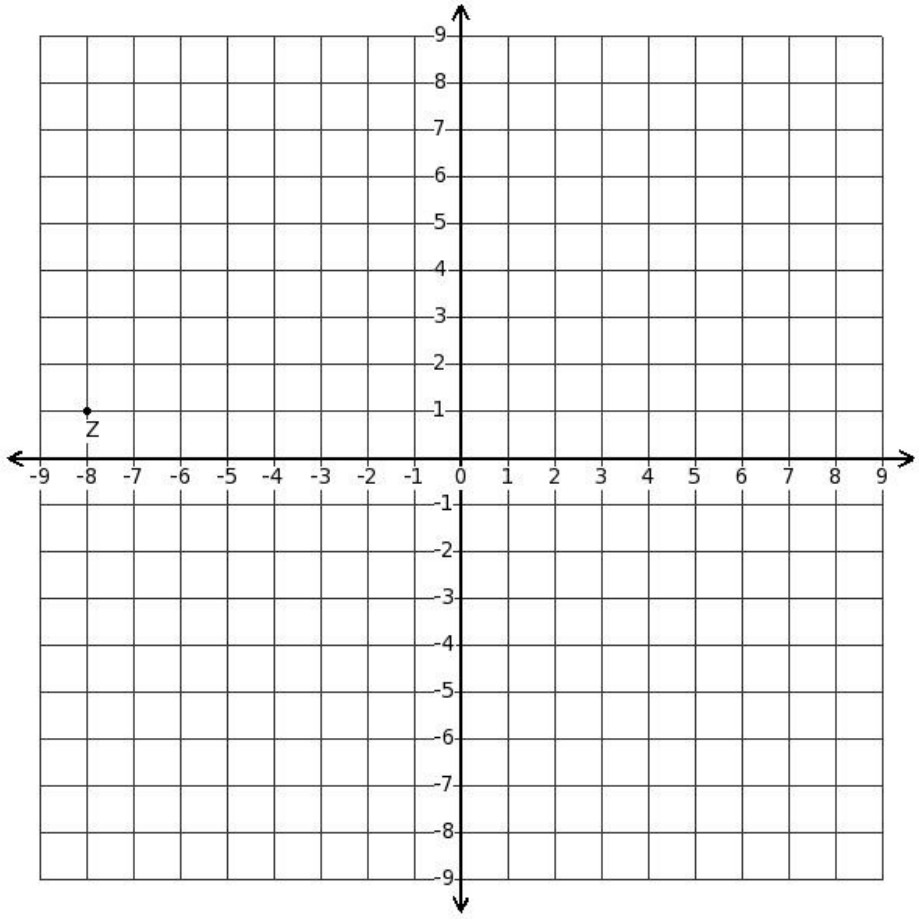
   a) Slope of any line parallel to y-axis is zero
   b) Slope of any line parallel to y-axis is not defined
   c) Slope of any line parallel to x-axis is zero
   d) Slope of any line parallel to x-axis is not defined

   (i) {a,c,b} (ii) {a,b} (iii) {a,d,b} (iv) {d,c} (v) {b,c}

7. The x-coordinate of a point is also called as

   (i) ordinate (ii) abscissa (iii) y-axis (iv) x-axis (v) origin

8. Determine the coordinates of point Z in the diagram.



(i) $((-8),1)$ (ii) $((-8),(-1))$ (iii) $(1,(-8))$ (iv) $(8,(-1))$ (v) $(8,1)$

9. 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) $(\frac{x_1+x_2}{2},\frac{y_1+y_2}{2})$ (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) $(\frac{y_1-y_2}{2},\frac{x_1-x_2}{2})$

10. If point P(x,y) lies in the third quadrant, then

(i) x is negative and y is negative (ii) x is negative and y is positive (iii) x is positive and y is positive

(iv) x is positive and y is negative

11. In what ratio is the join of $(6,(-3))$ and $((-5),(-7))$ divided by y-axis?

(i) 6:5 (ii) 8:9 (iii) 6:3 (iv) 10:9 (v) 6:7

12. In a coordinate geometry plane, the horizontal reference line is called

(i) abscissa (ii) ordinate (iii) x-axis (iv) y-axis (v) origin

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

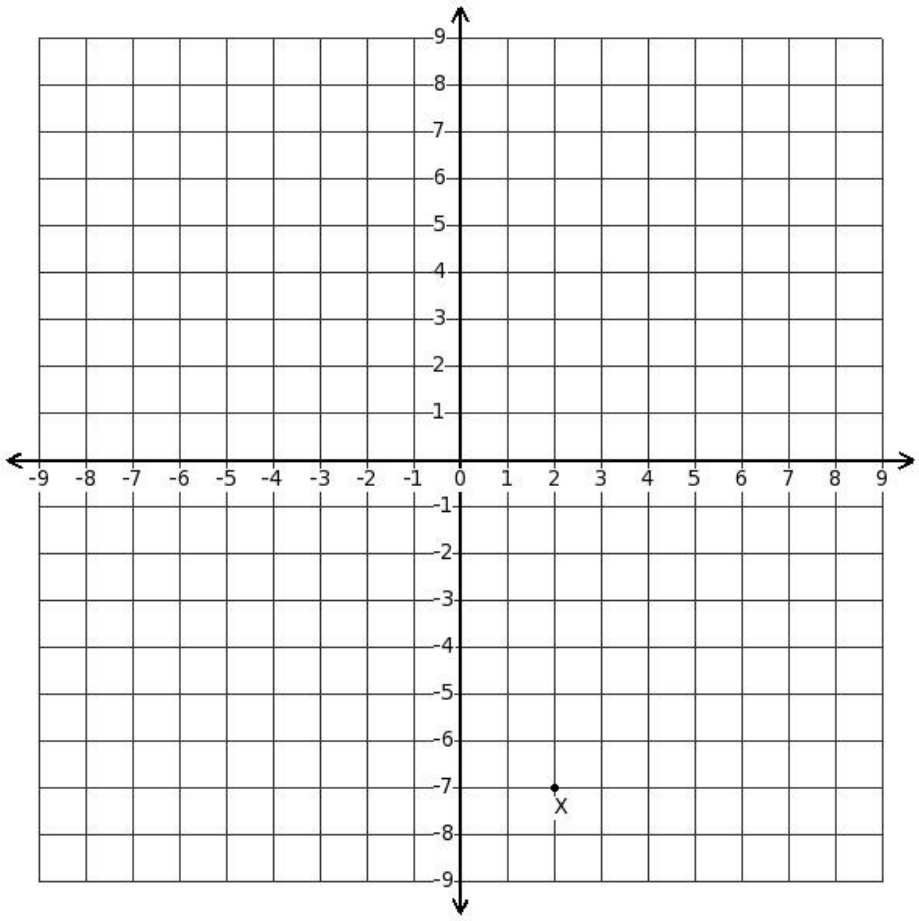
(i) collinear points (ii) isosceles right angled triangle (iii) equilateral triangle (iv) right angle triangle

(v) scalene triangle

14. A traffic sign board is in the shape of an equilateral triangle . If its perimeter is 48 cm, what is its area ?

(i) 88.85 sq.cm (ii) 135.85 sq.cm (iii) 94.85 sq.cm (iv) 127.85 sq.cm (v) 110.85 sq.cm

15. Determine the coordinates of point X in the diagram.



(i) $((-2),(-7))$ (ii) $(2,7)$ (iii) $(2,(-7))$ (iv) $((-7),2)$ (v) $((-2),7)$

16. Find the set of points satisfying the equation $y=(-4)$

(i) $((-2),(-4)),((-1),(-4)),(0,(-4)),(1,(-4)),(4,(-2))$

(ii) $((-2),(-4)),((-1),(-4)),((-2),(-6)),(1,(-4)),(2,(-4))$

(iii) $((-2),(-4)),((-1),(-4)),(1,(-5)),(1,(-4)),(2,(-4))$

(iv) $((-2),(-4)),((-1),(-4)),(0,(-4)),(0,(-3)),(2,(-4))$

(v) $((-2),(-4)),((-1),(-4)),(0,(-4)),(1,(-4)),(2,(-4))$

17. The coordinates of a point which is 5 units away from x-axis and 3 units away from y-axis in the second quadrant is

(i) $(3,(-5))$ (ii) $(3,5)$ (iii) $((-3),5)$ (iv) $(5,(-3))$ (v) $((-3),(-5))$

18. Which of the following are true?

a) The abscissa of every point on y-axis is zero
b) The ordinate of every point on y-axis is zero
c) The abscissa of every point on x-axis is zero
d) The ordinate of every point on x-axis is zero

(i) {b,c,a} (ii) {a,d} (iii) {c,d} (iv) {b,d,a} (v) {b,a}

19. Find the centroid of the triangle formed by the points $(6,0),((-2),(-3))$ and $((-8),(-7))$

(i) $((-\frac{7}{3}),(-\frac{7}{3}))$ (ii) $(\frac{2}{3},(-\frac{4}{3}))$ (iii) $((-\frac{10}{3}),(-\frac{16}{3}))$ (iv) $((-\frac{1}{3}),(-\frac{13}{3}))$ (v) $((-\frac{4}{3}),(-\frac{10}{3}))$

20. In what ratio is the join of $(7,9)$ and $(7,(-9))$ divided by x-axis?

(i) $8:4$ (ii) $8:9$ (iii) $10:9$ (iv) $9:9$

21. The point $((-6),(-9))$ lies in

(i) fourth quadrant (ii) second quadrant (iii) third quadrant (iv) first quadrant

22. Find the y-intercept of the line $(15x-11y+28)=0$

(i) $\frac{26}{11}$ (ii) $\frac{28}{9}$ (iii) $\frac{28}{11}$ (iv) $\frac{28}{13}$ (v) $\frac{30}{11}$

23. A farmer has a piece of land in the shape of a rhombus. He decided to divide the land into two equal parts such that both his son and daughter could work on the land to produce different crops. If the perimeter of the land is 480.00 m and one of the diagonals is 180 m, how much area will each get for their crops?

(i) 7223.53 sq.m (ii) 7303.53 sq.m (iii) 6993.53 sq.m (iv) 7143.53 sq.m (v) 6963.53 sq.m

24. Which of the following equations satisfy the given points $((-2),\frac{65}{9}),((-1),\frac{58}{9}),(0,\frac{17}{3}),(1,\frac{44}{9}),(2,\frac{37}{9})$?

(i) $(3x+10y-2)=0$ (ii) $x=(\frac{7}{9}y-\frac{83}{9})$ (iii) $y=(-\frac{7}{9}x+\frac{17}{3})$ (iv) $x=(-3)$ (v) $y=8$

25. Which of the following equations satisfy the given points $(6,(-2)),(6,(-1)),(6,0),(6,1),(6,2)$?

(i) $(32x+5y-4)=0$ (ii) $y=(-\frac{5}{3}x+6)$ (iii) $x=6$ (iv) $x=(\frac{5}{3}y+\frac{38}{3})$ (v) $y=(-4)$

Assignment Key

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