EduSahara™ Worksheet

Name : Chapter Based Worksheet

Chapter : Coordinate Geometry

Grade : SSC Grade X

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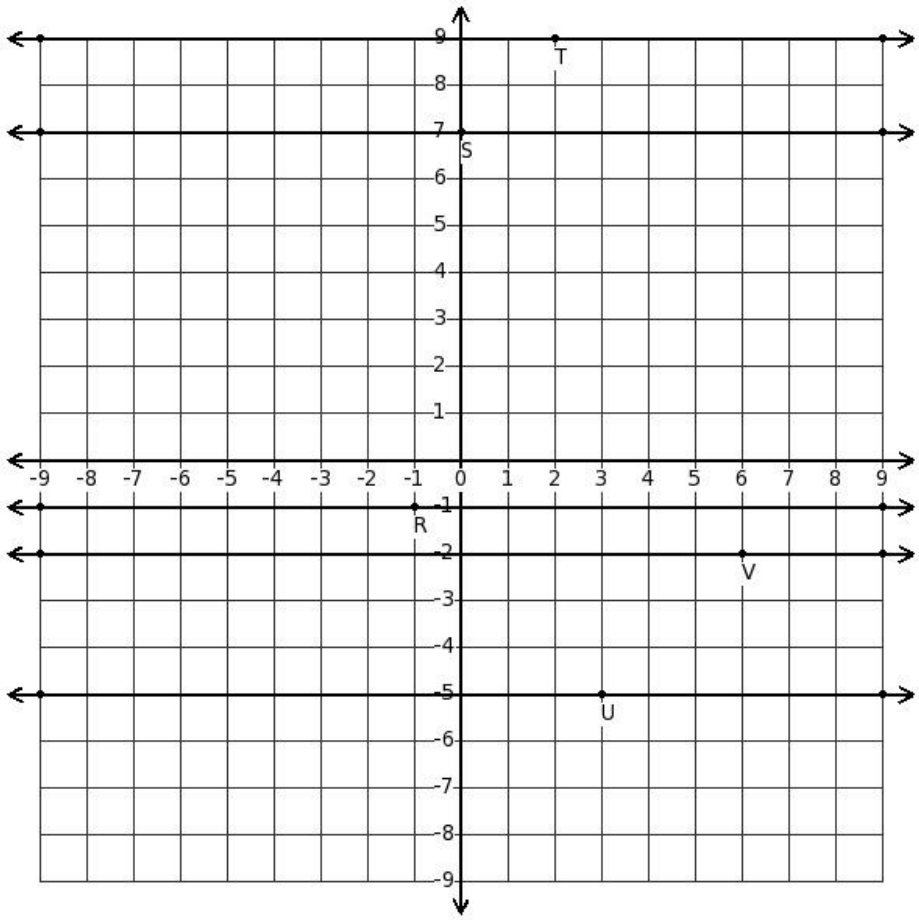
1. Which of the displayed lines represent the equation $y=(-1)$



(i) line with point T (ii) line with point U (iii) line with point V (iv) line with point R (v) line with point S

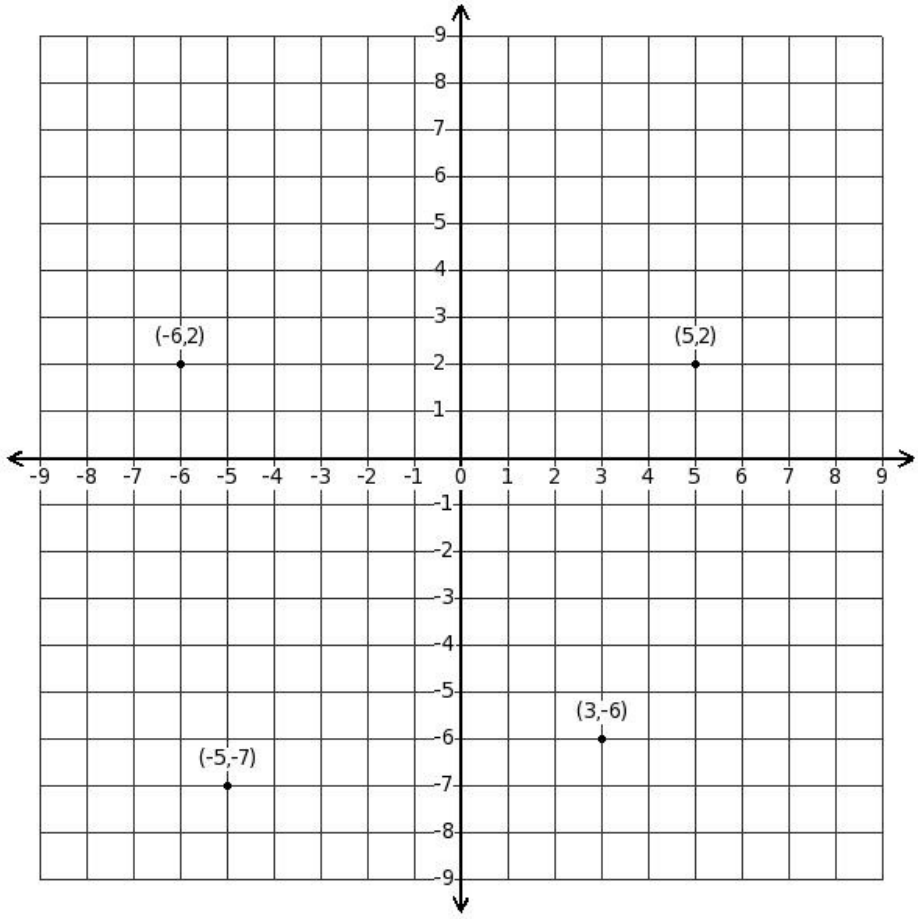
2. A triangle and a parallelogram, both have the same base and the same area. If the sides of the triangle are 23 cm, 13 cm and 20 cm, and the parallelogram stands on the base 13 cm, find the height of the parallelogram

(i) 11.97 cm (ii) 7.97 cm (iii) 10.97 cm (iv) 9.97 cm (v) 8.97 cm

3. Find the distance of the point $(7,6)$ from origin

(i) $\sqrt{85}$ (ii) $\sqrt{83}$ (iii) $\sqrt{87}$ (iv) $\sqrt[4]{85}$ (v) 85

4. Identify the point belonging to the third quadrant



(i) $((-6),2)$ (ii) $(3,(-6))$ (iii) $(5,2)$ (iv) $((-5),(-7))$

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

6. Find the set of points satisfying the equation $(4x+3y-2)=0$

(i) $((-2),\frac{10}{3}),((-1),2),(0,\frac{2}{3}),(1,(-\frac{2}{3})),(4,0)$ (ii) $((-2),\frac{10}{3}),((-1),2),(0,\frac{2}{3}),(0,\frac{1}{3}),(2,(-2))$

(iii) $((-2),\frac{10}{3}),((-1),2),(1,(-\frac{1}{3})),(1,(-\frac{2}{3})),(2,(-2))$

(iv) $((-2),\frac{10}{3}),((-1),2),((-2),(-\frac{4}{3})),(1,(-\frac{2}{3})),(2,(-2))$ (v) $((-2),\frac{10}{3}),((-1),2),(0,\frac{2}{3}),(1,(-\frac{2}{3})),(2,(-2))$

7. Find the area of the triangle formed by the points $((-4),8),((-6),3)$ and $(3,7)$

(i) $\frac{73}{4}$ (ii) 19 (iii) $\frac{39}{2}$ (iv) $\frac{37}{2}$ (v) $\frac{35}{2}$

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

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

(v) $(\frac{x_1 + x_2}{3}, \frac{y_1 + y_2}{3})$

9. The equation of the line with slope $m \neq 0$ and y-intercept $c \neq 0$ is

(i) $y = mx$ (ii) $y = 0$ (iii) $y = mx + c$ (iv) $x = my + c$ (v) $x = 0$

10. The slope of y-axis is

(i) undefined (ii) 0 (iii) 90 (iv) -1 (v) 1

11. Which of the following is a point on the negative y-axis?

(i) $(4,0)$ (ii) $(0,(-9))$ (iii) $((-9),0)$ (iv) $((-7),3)$ (v) $(0,5)$

12. Which of the following are true?

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

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

13. A line which is neither parallel to x-axis nor y-axis is

(i) a horizontal line (ii) an oblique line (iii) a vertical line (iv) a curved line

14. In what ratio is the join of $(9,(-7))$ and $((-4),1)$ divided by y-axis?

(i) 2:5 (ii) 9:4 (iii) 9:6 (iv) 9:1 (v) 0:5

15. Two vertices of a triangle are $(6,(-6)),((-7),(-4))$ and its centriod is $(\frac{7}{3},(-2))$. Find the coordinates of the third vertex of the triangle

(i) $((-8),4)$ (ii) $((-8),(-4))$ (iii) $(4,8)$ (iv) $(8,(-4))$ (v) $(8,4)$

16. If point P(x,6) is equidistant from the points $((-1),(-8))$ and $(0,0)$, find x

(i) $(\frac{-163}{2})$ (ii) $(\frac{-159}{2})$ (iii) $(\frac{-321}{4})$ (iv) $(\frac{-161}{2})$ (v) -81

17. The point of intersection of x-axis and y-axis

(i) $(0,0)$ (ii) $(1,1)$ (iii) $(1,0)$ (iv) $(0,4)$ (v) $(6,0)$

18. The mid-point of the join of points $(5,5)$ and $(8,3)$ is

(i) $(\frac{13}{2},4)$ (ii) $(\frac{9}{2},2)$ (iii) $(\frac{15}{2},3)$ (iv) $(\frac{11}{2},5)$ (v) $(\frac{17}{2},6)$

19. A field is in the shape of a trapezium whose parallel sides are 28 m and 10 m. The non parallel sides are 21 m and 26 m. Find the area of the field.

(i) 392.23 sq.m (ii) 421.23 sq.m (iii) 396.23 sq.m (iv) 372.23 sq.m (v) 408.23 sq.m

20. Find the set of points satisfying the equation $x=(\frac{2}{9}y+\frac{50}{9})$

(i) $((-2),(-34)),((-1),(-\frac{59}{2})),(0,(-25)),(0,(-\frac{39}{2})),(2,(-16))$

(ii) $((-2),(-34)),((-1),(-\frac{59}{2})),(1,(-26)),(1,(-\frac{41}{2})),(2,(-16))$

(iii) $((-2),(-34)),((-1),(-\frac{59}{2})),((-2),(-27)),(1,(-\frac{41}{2})),(2,(-16))$

(iv) $((-2),(-34)),((-1),(-\frac{59}{2})),(0,(-25)),(1,(-\frac{41}{2})),(4,(-14))$

(v) $((-2),(-34)),((-1),(-\frac{59}{2})),(0,(-25)),(1,(-\frac{41}{2})),(2,(-16))$

21. 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 520.00 m and one of the diagonals is 140 m, how much area will each get for their crops?

(i) 7598.12 sq.m (ii) 7668.12 sq.m (iii) 7798.12 sq.m (iv) 7818.12 sq.m (v) 7448.12 sq.m

22. The coordinates of a point which is 5 units away from x-axis and 2 units away from y-axis in the first quadrant is

(i) $(2,(-5))$ (ii) $(5,2)$ (iii) $(2,5)$ (iv) $((-2),(-5))$ (v) $((-2),5)$

23. Which of the following equations satisfy the given points $((-2),(-\frac{2}{3})),((-1),(-\frac{5}{2})),(0,(-\frac{13}{3})),(1,(-\frac{37}{6})),(2,(-8))$?

(i) $(2x+2y-1)=0$ (ii) $(-11x-6y-26)=0$ (iii) $x=8$ (iv) $y=(-\frac{11}{6}x+\frac{71}{3})$ (v) $x=(\frac{11}{6}y-\frac{17}{2})$

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

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

25. Find the ratio in which point $(0,(-\frac{21}{5}))$ divides the join of points $((-1),(-6))$ and $(4,3)$

(i) 1:6 (ii) 2:4 (iii) 1:1 (iv) 0:4 (v) 1:4

Assignment Key

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