EduSahara™ Worksheet

Name : Chapter Based Worksheet

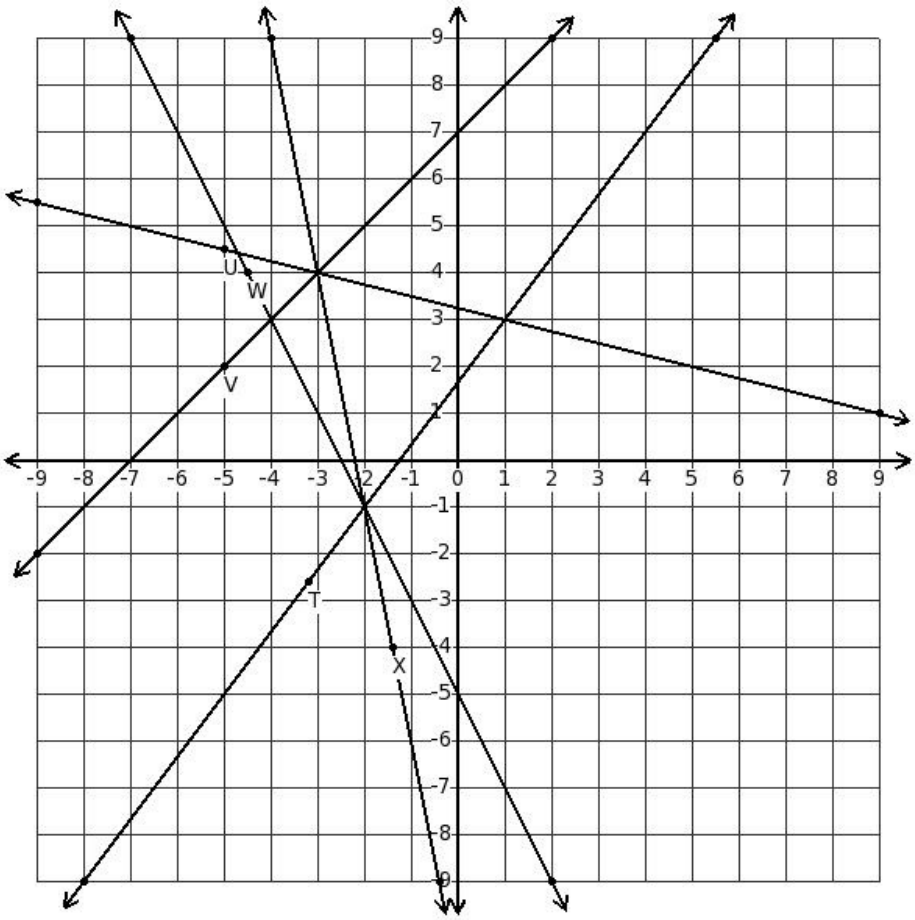
Chapter : Linear Equation in Two variables

Grade : SSC Grade IX

1. Equation of a straight line which is parallel to y-axis (where k is a constant) is

   (i) $x=k$ (ii) $y=k$ (iii) $x=0$ (iv) $x=y$ (v) $y=0$

2. Which of the displayed lines represent the equation $y=(\frac{4}{3}x+\frac{5}{3})$



   (i) line with point W (ii) line with point T (iii) line with point U (iv) line with point X (v) line with point V

3. Write the given equation $(-6x+y+30)=0$ in $y=mx+c$ form

   (i) $y=(6x-30)$ (ii) $y=(5x-30)$ (iii) $y=(6x-32)$ (iv) $y=(6x-27)$ (v) $y=(7x-30)$

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

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

5. Find the set of points satisfying the equation $y=(9x+40)$

   (i) $((-2),22),((-1),31),(0,40),(1,49),(4,60)$ (ii) $((-2),22),((-1),31),(0,40),(1,49),(2,58)$

   (iii) $((-2),22),((-1),31),(1,39),(1,49),(2,58)$ (iv) $((-2),22),((-1),31),(0,40),(0,50),(2,58)$

   (v) $((-2),22),((-1),31),((-2),38),(1,49),(2,58)$

6. The value of y in terms of other variables and constant in $(-5x+3y+1)=(7x+4y+7)$ is

   (i) $y=(-11x-6)$ (ii) $y=(-12x-6)$ (iii) $y=(-13x-6)$ (iv) $y=(-12x-9)$ (v) $y=(-12x-3)$

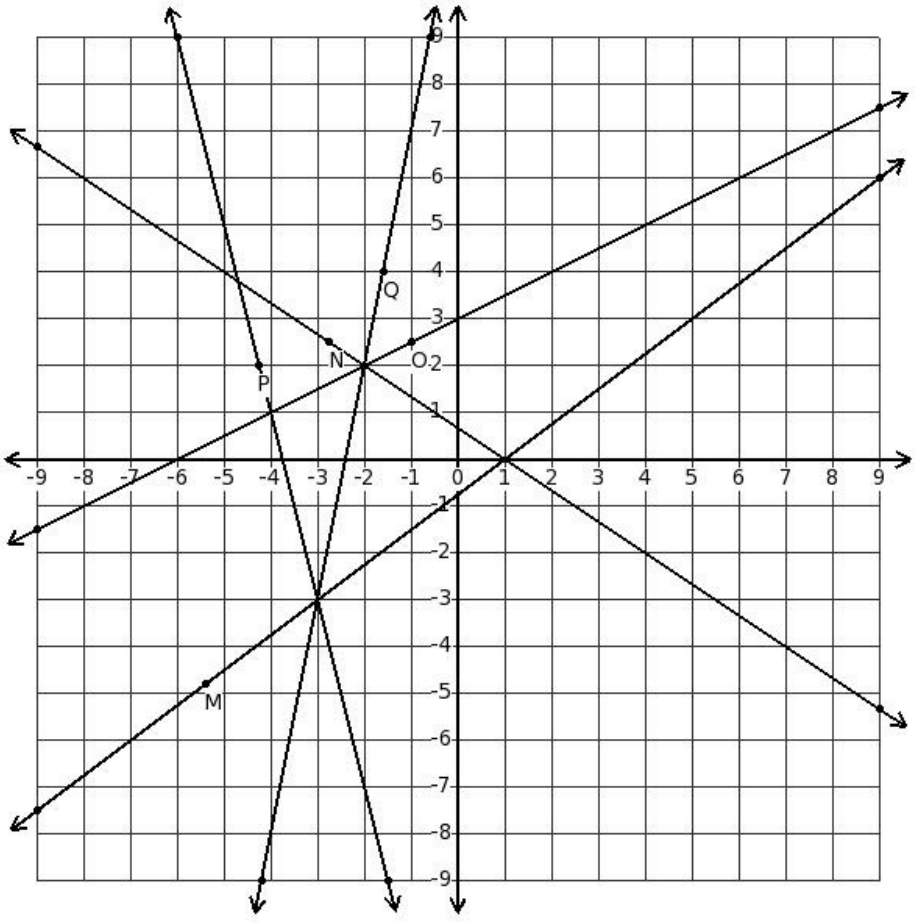
7. Which of the following equations satisfy the given points $((-2),\frac{21}{4}),((-1),4),(0,\frac{11}{4}),(1,\frac{3}{2}),(2,\frac{1}{4})$?

(i) $x=(-5)$ (ii) $y=0$ (iii) $(-10x-8y+22)=0$ (iv) $y=(-\frac{5}{4}x-\frac{25}{4})$ (v) $x=(\frac{5}{4}y-5)$

8. Any line parallel to y-axis is

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

9. Which of the displayed lines represent the equation $(3x-4y-3)=0$?



(i) line with point P (ii) line with point M (iii) line with point N (iv) line with point O (v) line with point Q

10. The equation of y-axis is

(i) $x=1$ (ii) $y=1$ (iii) $y=0$ (iv) $x=0$ (v) $y=x$

11. Equation of a straight line which is parallel to x-axis (where k is a constant) is

(i) $x=k$ (ii) $x=0$ (iii) $x=y$ (iv) $y=0$ (v) $y=k$

12. Which of the following lines do not pass through the origin?

(i) $(2x-6y)=0$ (ii) $(7x+y)=0$ (iii) $(-4x-7y)=0$ (iv) $(5x+7y+32)=0$ (v) $(-x+5y)=0$

13. Find the set of points satisfying the equation $y=9$

(i) $((-2),9),((-1),9),(0,9),(1,9),(2,9)$ (ii) $((-2),9),((-1),9),(0,9),(0,10),(2,9)$

(iii) $((-2),9),((-1),9),(1,8),(1,9),(2,9)$ (iv) $((-2),9),((-1),9),((-2),7),(1,9),(2,9)$

(v) $((-2),9),((-1),9),(0,9),(1,9),(4,11)$

14. Write the given equation $y=1$ in $ax+by+c=0$ form

(i) $(2y-1)=0$ (ii) $(y-1)=0$ (iii) $(-1)=0$ (iv) $(y+1)=0$ (v) $(y-4)=0$

15. The equation of the x-axis is

a) $x=y$
b) $y=0$
c) $x=1$
d) $y=1$
e) $x=0$

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

16. Find the equation of a straight line parallel to x-axis and passing through the point $((-1),6)$

(i) $x=(-1)$ (ii) $x=2$ (iii) $y=5$ (iv) $y=6$ (v) $y=8$

17. Which of the following are true?

a) Equation of the line passing through origin is y = x
b) Equation of the line passing through origin is $y=mx$
c) Equation of the line passing through origin is $y=mx+c$
d) Equation of the line passing through origin is y = mx +3

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

18. Find the set of points satisfying the equation $(-11x-8y+37)=0$

(i) $((-2),\frac{59}{8}),((-1),6),((-2),\frac{21}{8}),(1,\frac{13}{4}),(2,\frac{15}{8})$ (ii) $((-2),\frac{59}{8}),((-1),6),(0,\frac{37}{8}),(1,\frac{13}{4}),(4,\frac{31}{8})$

(iii) $((-2),\frac{59}{8}),((-1),6),(0,\frac{37}{8}),(0,\frac{17}{4}),(2,\frac{15}{8})$ (iv) $((-2),\frac{59}{8}),((-1),6),(0,\frac{37}{8}),(1,\frac{13}{4}),(2,\frac{15}{8})$

(v) $((-2),\frac{59}{8}),((-1),6),(1,\frac{29}{8}),(1,\frac{13}{4}),(2,\frac{15}{8})$

19. Which of the following equations satisfy the given points $((-2),3),((-1),3),(0,3),(1,3),(2,3)$?

(i) $y=3$ (ii) $(-13x-13y+39)=0$ (iii) $x=(y-2)$ (iv) $(72x+63y-56)=0$ (v) $x=1$

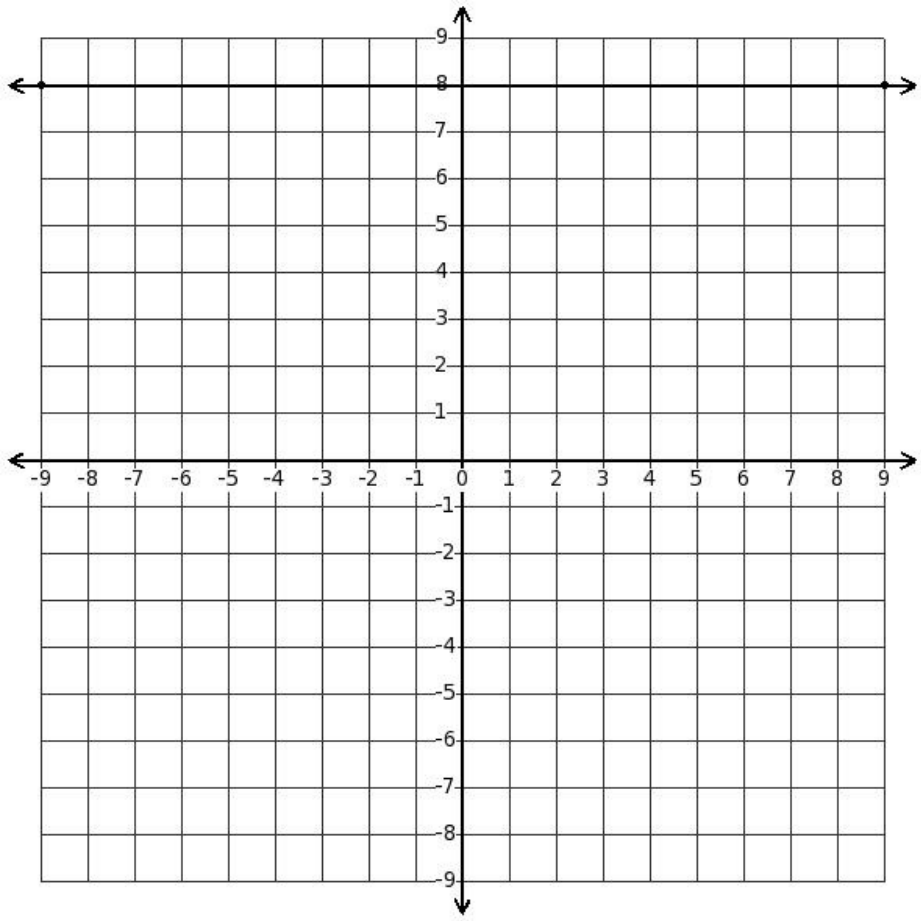
20. Find the set of points satisfying the equation $x=7$

(i) $(7,(-2)),(7,(-1)),(7,0),(7,1),(7,2)$ (ii) $(7,(-2)),(7,(-1)),(7,0),(6,2),(7,2)$

(iii) $(7,(-2)),(7,(-1)),(7,0),(7,1),(9,4)$ (iv) $(7,(-2)),(7,(-1)),(5,(-2)),(7,1),(7,2)$

(v) $(7,(-2)),(7,(-1)),(8,(-1)),(7,1),(7,2)$

21. Find the equation of the displayed line



(i) $y=7$ (ii) $4y=8$ (iii) $x=8$ (iv) $y=9$ (v) $y=8$

22. The equation of the line passing through the origin and having a slope $m\neq 0$ is

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

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

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

24. Which of the following is a linear equation in two variable?

(i) $(6x^2+13xy-8x-8y^2+23y-14)=0$ (ii) $(-72x^2-2x+4)=0$ (iii) $(4x-3y)=0$ (iv) $(-3x-2)=0$

(v) $(-2x-4y-z-7)=0$

25. The linear equation $(-5x-4y+4)=(9x-y-6)$ is equivalent to

(i) $(-14x-3y+10)=0$ (ii) $(-5x-4y+4)=(9x+y-6)$ (iii) $(-15x-3y+10)=0$

(iv) $(-5x-4y+4)=(9x-4y-6)$ (v) $(-13x-3y+10)=0$

Assignment Key

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