EduSahara™ Worksheet

Name : Chapter Based Worksheet

Chapter : Pair of Linear Equations in Two Variables

Grade : SSC Grade X

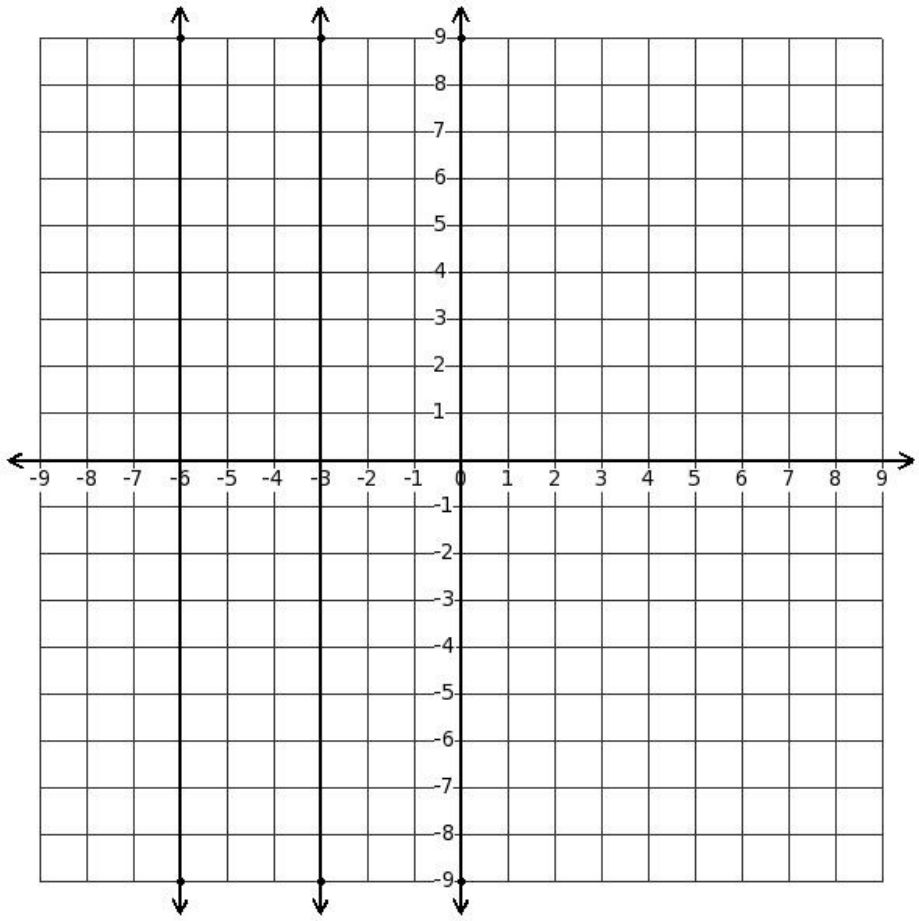
1. Find the equation parallel to the given equation $(5x+6y-6)=0$

   (i) $(-6x+5y+42)=0$ (ii) $(5x+6y-12)=0$ (iii) $(-11x+5y+118)=0$ (iv) $(-x+6y-27)=0$

2. Which of the following equations satisfy the given points $((-2),\frac{11}{5}),((-1),\frac{6}{5}),(0,\frac{1}{5}),(1,(-\frac{4}{5})),(2,(-\frac{9}{5}))$?

   (i) $(5x+5y-1)=0$ (ii) $y=(-5)$ (iii) $y=(-\frac{6}{7}x-\frac{5}{7})$ (iv) $x=(\frac{6}{7}y+\frac{65}{7})$ (v) $x=5$

3. Solve $(x+6)=0$
   $(x+3)=0$



   (i) $(0,0)$ (ii) $((-2),5)$ (iii) $(0,7)$ (iv) Infinite solutions (v) No solution

4. Find the set of points satisfying the equation $y=\frac{11}{4}x$

(i) $((-2),(-\frac{11}{2})),((-1),(-\frac{11}{4})),(0,0),(1,\frac{11}{4}),(4,\frac{15}{2})$

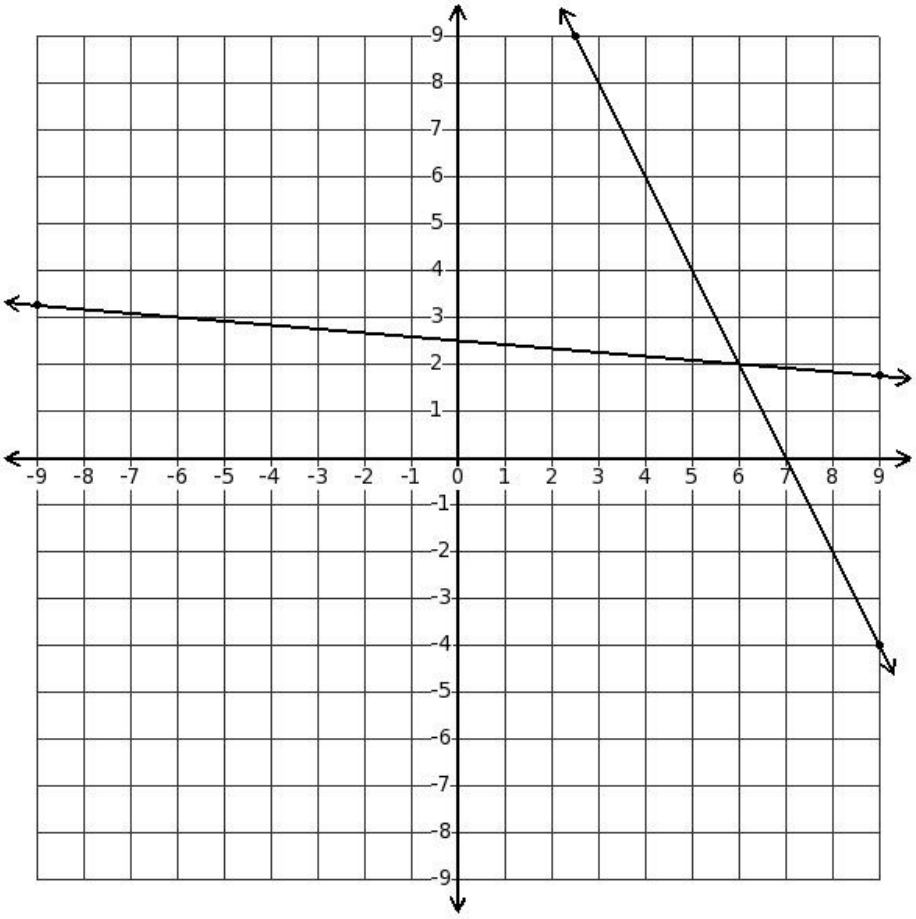
(ii) $((-2),(-\frac{11}{2})),((-1),(-\frac{11}{4})),(1,(-1)),(1,\frac{11}{4}),(2,\frac{11}{2})$

(iii) $((-2),(-\frac{11}{2})),((-1),(-\frac{11}{4})),(0,0),(0,\frac{15}{4}),(2,\frac{11}{2})$

(iv) $((-2),(-\frac{11}{2})),((-1),(-\frac{11}{4})),(0,0),(1,\frac{11}{4}),(2,\frac{11}{2})$

(v) $((-2),(-\frac{11}{2})),((-1),(-\frac{11}{4})),((-2),(-2)),(1,\frac{11}{4}),(2,\frac{11}{2})$

5. Solve $(-2x-y+14)=0$
$(x+12y-30)=0$



(i) $(4,0)$ (ii) $(7,1)$ (iii) $(5,3)$ (iv) $(8,4)$ (v) $(6,2)$

Solve the following pair of equations :

6. $$-\frac{9}{x}+\frac{3}{y}=18$$

$$-\frac{5}{x}-\frac{4}{y}=(-41)$$

(i) $(\frac{1}{1},\frac{1}{7})$ (ii) $(2,\frac{1}{9})$ (iii) $(\frac{1}{1},\frac{1}{9})$ (iv) $(3,\frac{1}{9})$ (v) $(\frac{1}{1},(\frac{-1}{9}))$

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

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

8. Which of the following equations satisfy the given points $((-2),(-\frac{1}{11})),((-1),(-\frac{10}{11})),(0,(-\frac{19}{11})),(1,(-\frac{28}{11})),(2,(-\frac{37}{11}))$?

(i) $x=(\frac{9}{11}y+\frac{84}{11})$ (ii) $y=(-\frac{9}{11}x+\frac{32}{11})$ (iii) $x=6$ (iv) $(-9x-11y-19)=0$ (v) $(2x+3y-1)=0$

9. Which of the following pairs of lines are parallel?

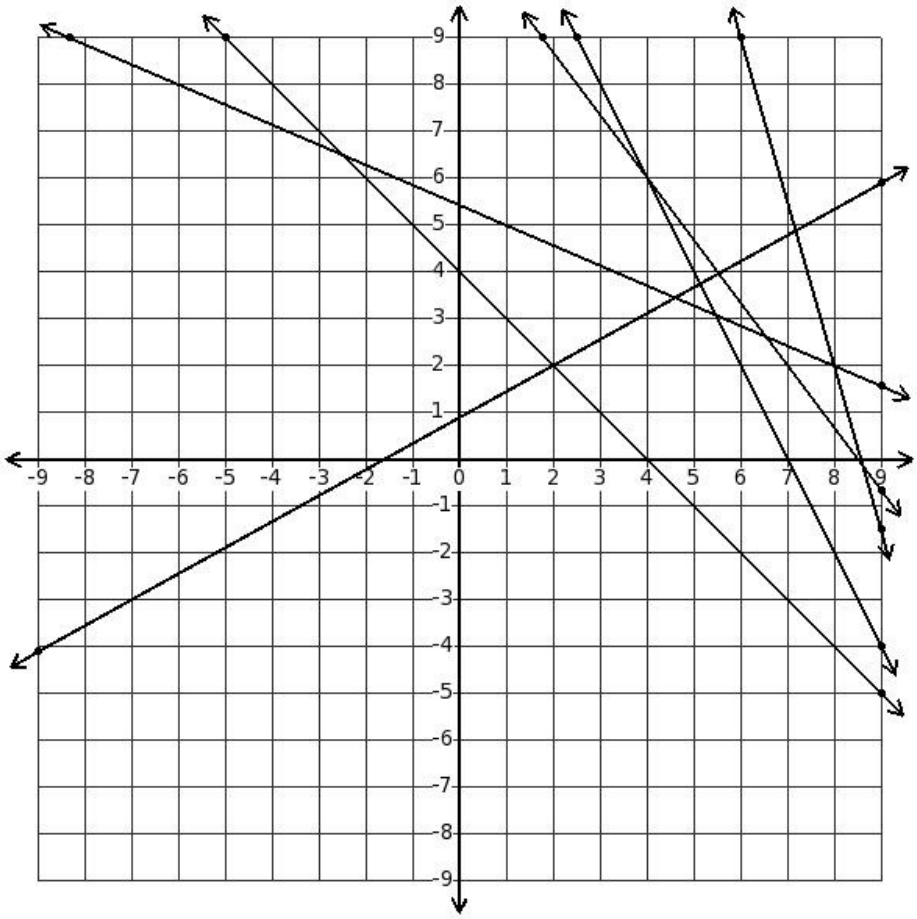
(i) $(2x+5y+32)=0,(-7x+2y-36)=0$ (ii) $(2x+5y+32)=0,(-3x+5y-36)=0$

(iii) $(2x+5y+32)=0,(2x+5y-26)=0$ (iv) $(2x+5y+32)=0,(-5x+2y-24)=0$

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

(i) $(0,0)$ (ii) $(8,0)$ (iii) $(1,1)$ (iv) $(0,9)$ (v) $(1,0)$

11. Solve $\begin{matrix}(-x-y+4) & = 0\\ (-5x+9y-8) & = 0\end{matrix}$



(i) (4,6) (ii) (0,0) (iii) (2,2) (iv) (4,4) (v) (8,2)

Solve the following pair of equations :

12. $(-13x-4y)=29xy$

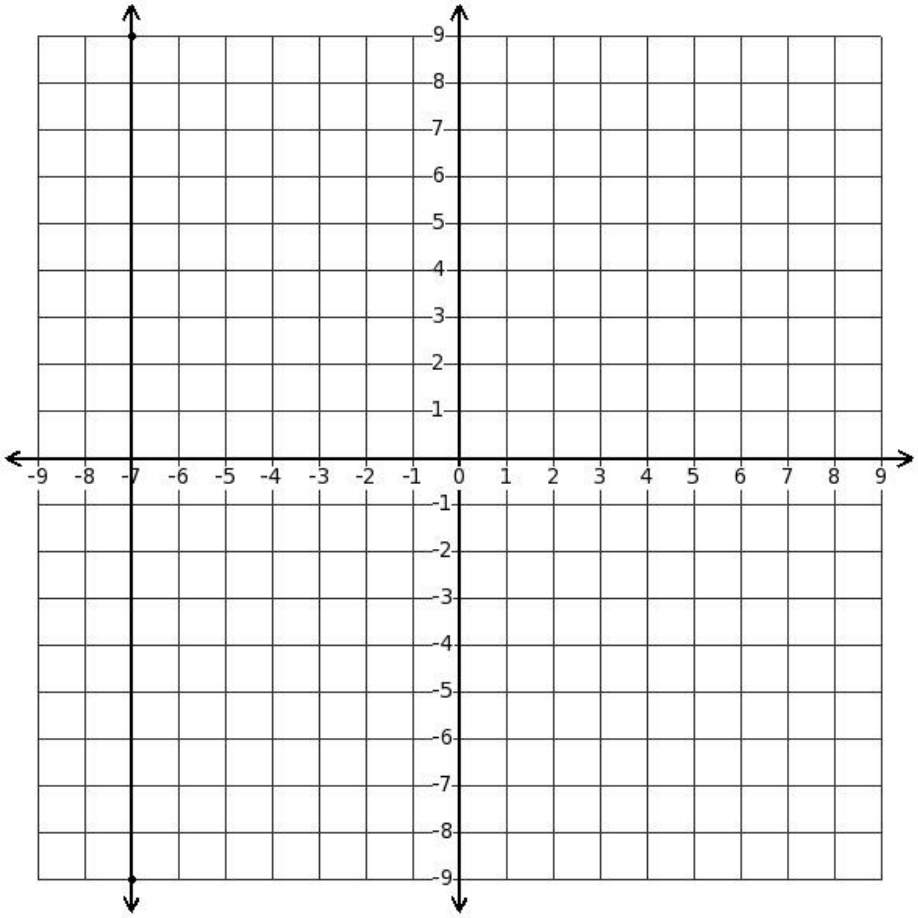
$(-11x-5y)=31xy$

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

13. Find the value of k such that $(4x+3y-15)=0$ and $(kx+3y+33)=0$ are parallel to each other

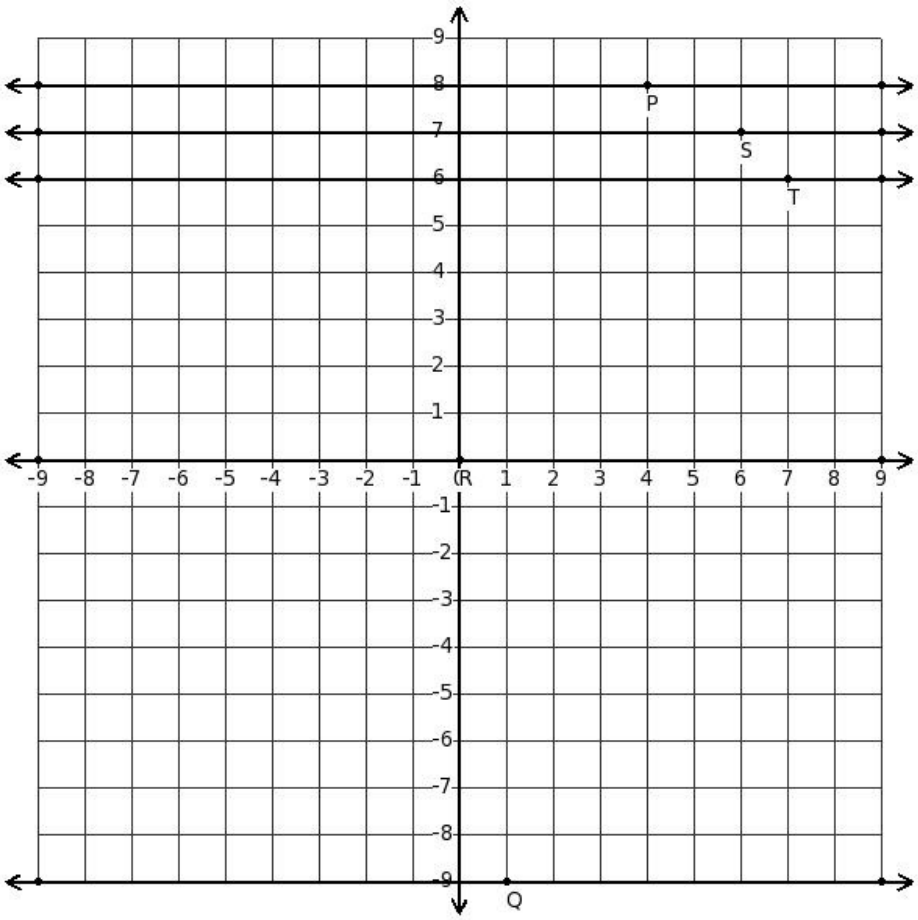
(i) 7 (ii) 2 (iii) 3 (iv) 4 (v) 5

14. Find the equation of the displayed line



(i) $x=(-6)$ (ii) $x=(-8)$ (iii) $4x=(-7)$ (iv) $y=(-7)$ (v) $x=(-7)$

15. Which of the displayed lines represent the equation $y=8$



(i) line with point R (ii) line with point T (iii) line with point P (iv) line with point Q (v) line with point S

16. Find the set of points satisfying the equation $y=(-\frac{13}{18}x-\frac{1}{2})$

(i) $((-2),\frac{17}{18}),((-1),\frac{2}{9}),(1,(-\frac{3}{2})),(1,(-\frac{11}{9})),(2,(-\frac{35}{18}))$

(ii) $((-2),\frac{17}{18}),((-1),\frac{2}{9}),(0,(-\frac{1}{2})),(1,(-\frac{11}{9})),(2,(-\frac{35}{18}))$

(iii) $((-2),\frac{17}{18}),((-1),\frac{2}{9}),((-2),(-\frac{5}{2})),(1,(-\frac{11}{9})),(2,(-\frac{35}{18}))$

(iv) $((-2),\frac{17}{18}),((-1),\frac{2}{9}),(0,(-\frac{1}{2})),(1,(-\frac{11}{9})),(4,\frac{1}{18})$

(v) $((-2),\frac{17}{18}),((-1),\frac{2}{9}),(0,(-\frac{1}{2})),(0,(-\frac{2}{9})),(2,(-\frac{35}{18}))$

Solve the following pair of equations :

17.
$$-\frac{1}{(x+y)}+\frac{2}{(x-y)}=(-5)$$

$$\frac{12}{(x+y)}-\frac{9}{(x-y)}=0$$

(i) $((\frac{-5}{24}),(\frac{-1}{24}))$ (ii) $((\frac{-7}{24}),(\frac{-1}{22}))$ (iii) $((\frac{-7}{26}),(\frac{-1}{24}))$ (iv) $((\frac{-7}{24}),(\frac{-1}{8}))$ (v) $((\frac{-7}{24}),(\frac{-1}{24}))$

18. Solve $\begin{matrix}(4x+y-17)=0\\(2x+y-9)=0\end{matrix}$

(i) $(4,-1)$ (ii) $(5,1)$ (iii) $(6,1)$ (iv) $(4,1)$ (v) $(4,0)$

19. Find the set of points satisfying the equation $(-9x-2y+42)=0$

(i) $((-2),30),((-1),\frac{51}{2}),(0,21),(1,\frac{33}{2}),(4,14)$ (ii) $((-2),30),((-1),\frac{51}{2}),(0,21),(1,\frac{33}{2}),(2,12)$

(iii) $((-2),30),((-1),\frac{51}{2}),((-2),19),(1,\frac{33}{2}),(2,12)$ (iv) $((-2),30),((-1),\frac{51}{2}),(1,20),(1,\frac{33}{2}),(2,12)$

(v) $((-2),30),((-1),\frac{51}{2}),(0,21),(0,\frac{35}{2}),(2,12)$

20. The ratio of coefficients of x and y in the equations of any two parallel lines is

(i) 2 (ii) 1 (iii) same (iv) not proportional (v) not same

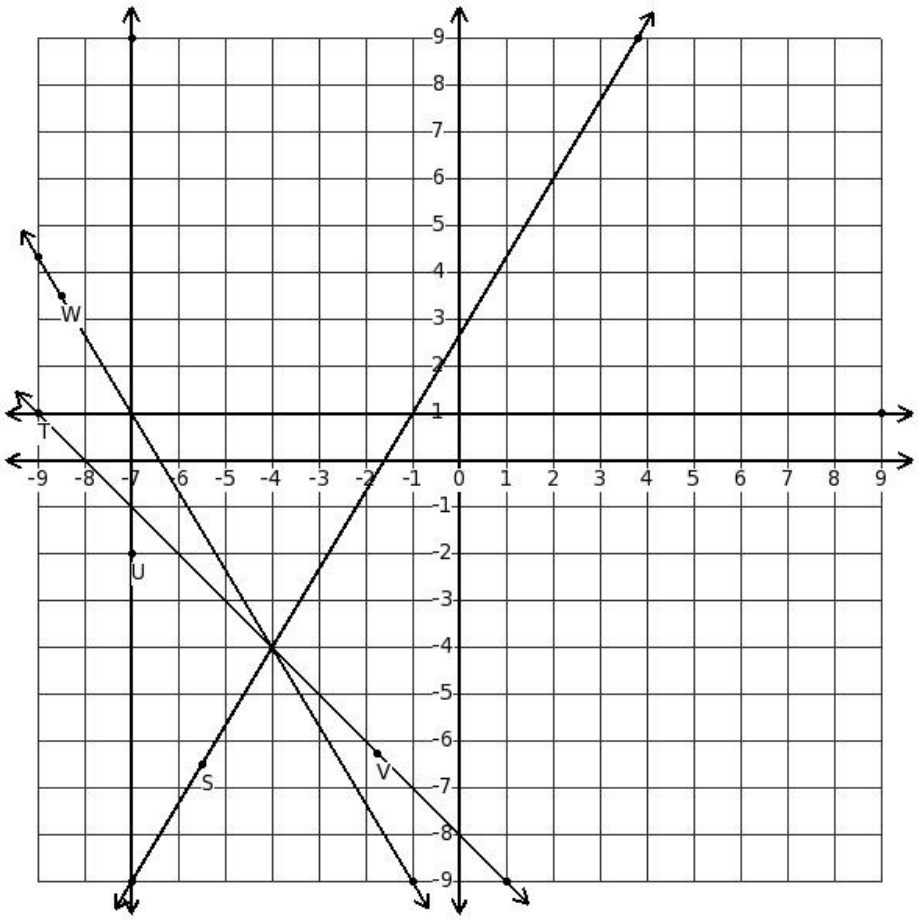
Solve the following pair of equations :

21. $\frac{9}{\sqrt{x}} - \frac{2}{\sqrt{y}} = -37$

$\frac{2}{\sqrt{x}} + \frac{3}{\sqrt{y}} = -22$

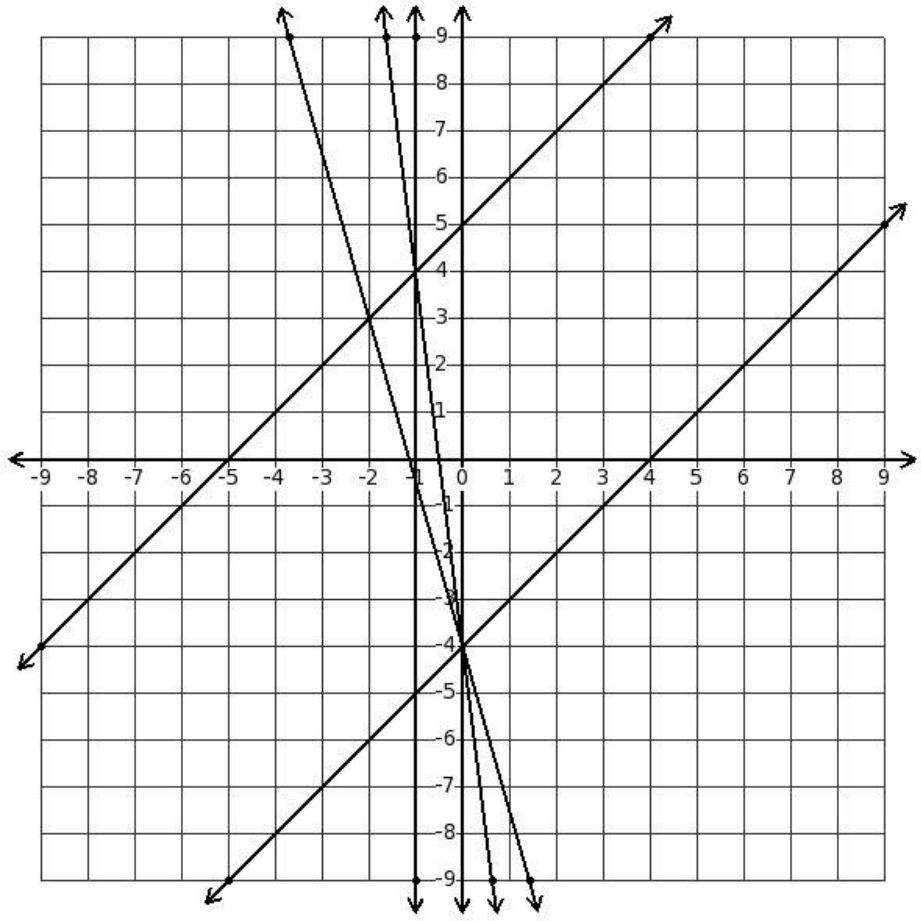
(i) $(\frac{1}{25}, \frac{1}{16})$ (ii) $(\frac{1}{27}, \frac{1}{16})$ (iii) $(\frac{3}{25}, \frac{1}{16})$ (iv) $(\frac{1}{25}, (\frac{-1}{16}))$ (v) $(\frac{1}{25}, \frac{1}{14})$

22. Which of the displayed lines represent the equation $(5x-3y+8)=0$?



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

23. Solve $(-x+y-5)=0$
$(x+1) \quad = \quad 0$



(i) $((-2),3)$ (ii) $((-1),4)$ (iii) $(0,4)$ (iv) $(0,(-4))$ (v) $((-1),0)$

24. Find the set of points satisfying the equation $x=(-9)$

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

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

(iii) $((-9),(-2)),((-9),(-1)),((-11),(-2)),((-9),1),((-9),2)$

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

(v) $((-9),(-2)),((-9),(-1)),((-8),(-1)),((-9),1),((-9),2)$

25. Find the set of points satisfying the equation $y=4$

(i) $((-2),4),((-1),4),(0,4),(0,5),(2,4)$ (ii) $((-2),4),((-1),4),(0,4),(1,4),(2,4)$

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

(v) $((-2),4),((-1),4),(0,4),(1,4),(4,6)$

Assignment Key

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