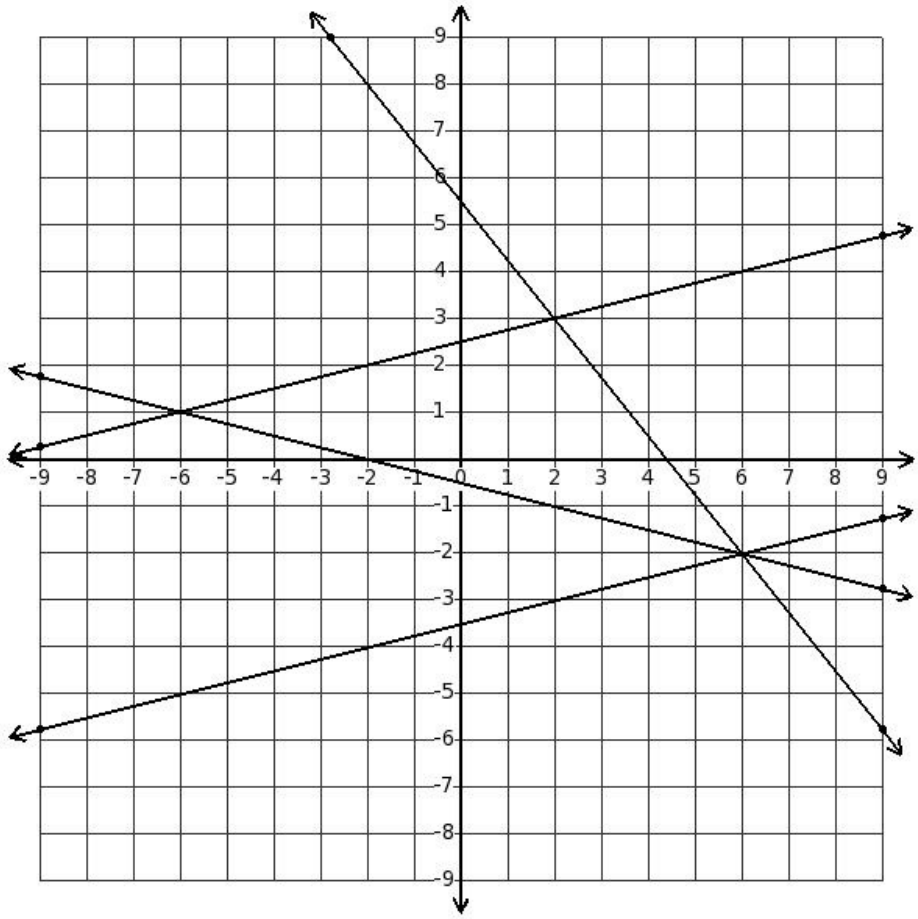
EduSahara™ Worksheet

Name : Chapter Based Worksheet

Chapter : Pair of Linear Equations in Two Variables

Grade : CBSE Grade X

1. Solve $\begin{matrix}(2x-8y+20) &= 0\\ (6x-24y+60) &= 0\end{matrix}$



(i) Infinite solutions (ii) No solution (iii) $((-6),1)$ (iv) $(6,(-2))$ (v) $(2,3)$

2. Solve $\begin{matrix}(-3x+11y-90) &= 0\\ (-7x-2y+39) &= 0\end{matrix}$

(i) $(4,9)$ (ii) $(3,8)$ (iii) $(3,9)$ (iv) $(3,6)$ (v) $(6,9)$

3. Any line parallel to y-axis is

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

4 men and 1 women can do a piece of work in 32 days.

4. 4 men and 5 women can do the same work in 8 days.

In how many days can 3 men and 4 women complete the same work?

(i) $10\frac{2}{53}$ days (ii) $10\frac{4}{51}$ days (iii) $10\frac{2}{51}$ days (iv) 10 days (v) $10\frac{2}{49}$ days

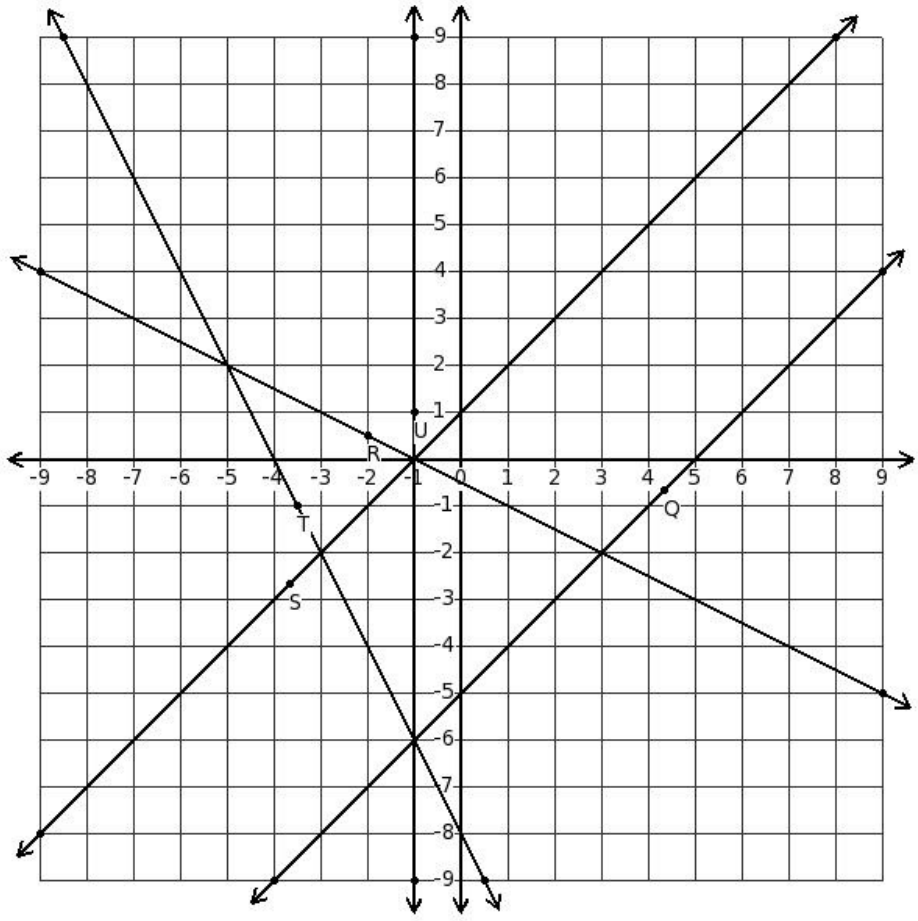
5. Find the set of points satisfying the equation $(-5x-y+11)=0$

(i) $((-2),21),((-1),16),(0,11),(1,6),(2,1)$ (ii) $((-2),21),((-1),16),(1,10),(1,6),(2,1)$

(iii) $((-2),21),((-1),16),((-2),9),(1,6),(2,1)$ (iv) $((-2),21),((-1),16),(0,11),(1,6),(4,3)$

(v) $((-2),21),((-1),16),(0,11),(0,7),(2,1)$

6. Which of the displayed lines represent the equation $y=(x-5)$



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

7. Which of the following equations satisfy the given points $((-2),\frac{24}{5}),((-1),\frac{27}{10}),(0,\frac{3}{5}),(1,(-\frac{3}{2})),(2,(-\frac{18}{5}))$?

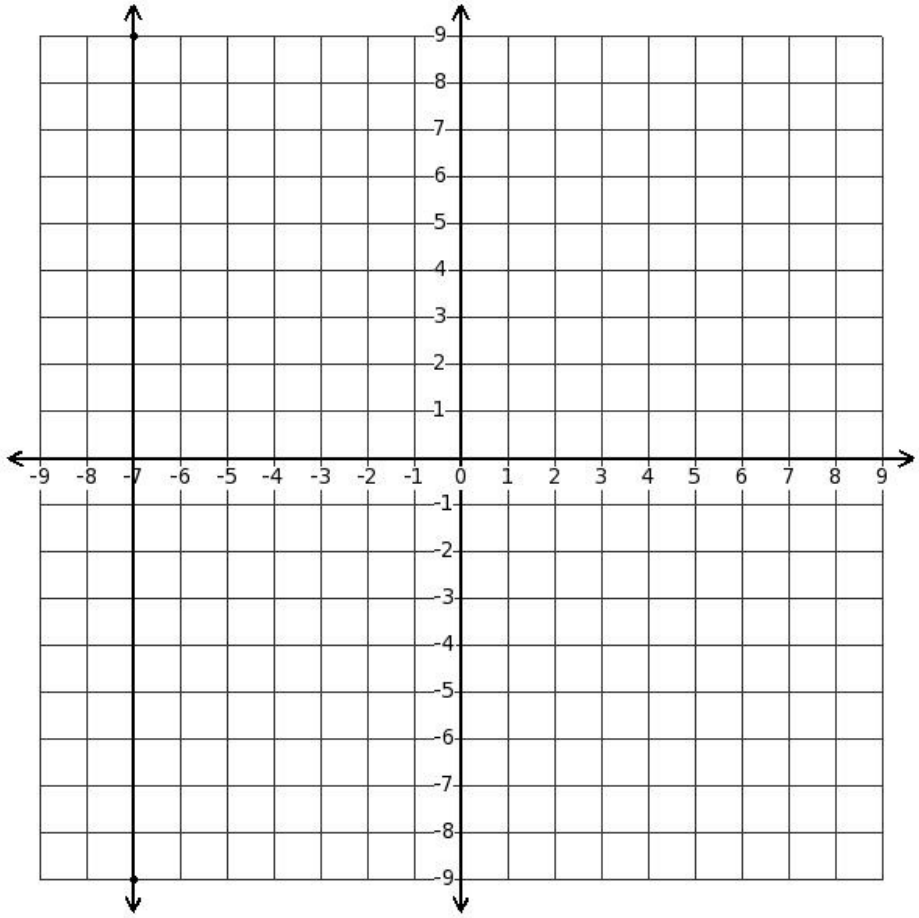
(i) $y=5$ (ii) $x=6$ (iii) $(21x+10y-6)=0$ (iv) $(-11x-8y-20)=0$ (v) $y=(-\frac{11}{8}x+\frac{53}{4})$

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

(i) $(5x-2y+11)=0,(-3x+5y+9)=0$ (ii) $(5x-2y+11)=0,(-7x+2y-10)=0$

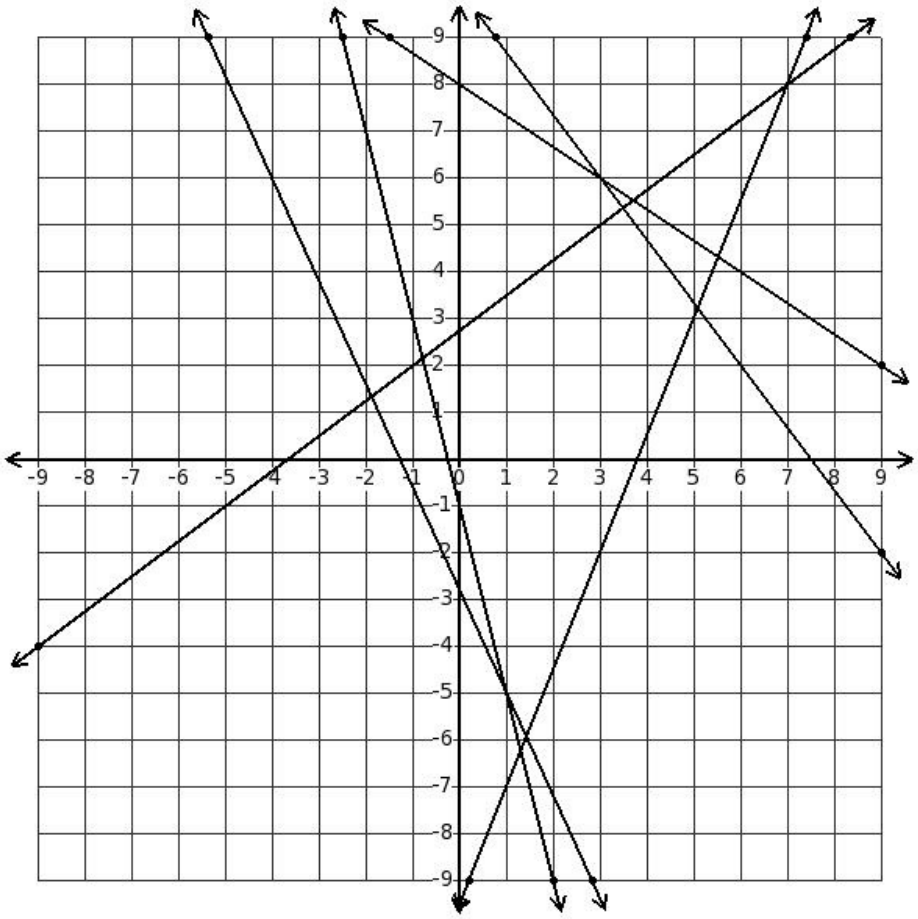
(iii) $(5x-2y+11)=0,(2x+5y+19)=0$ (iv) $(5x-2y+11)=0,(-5x+2y-10)=0$

9. Find the equation of the displayed line



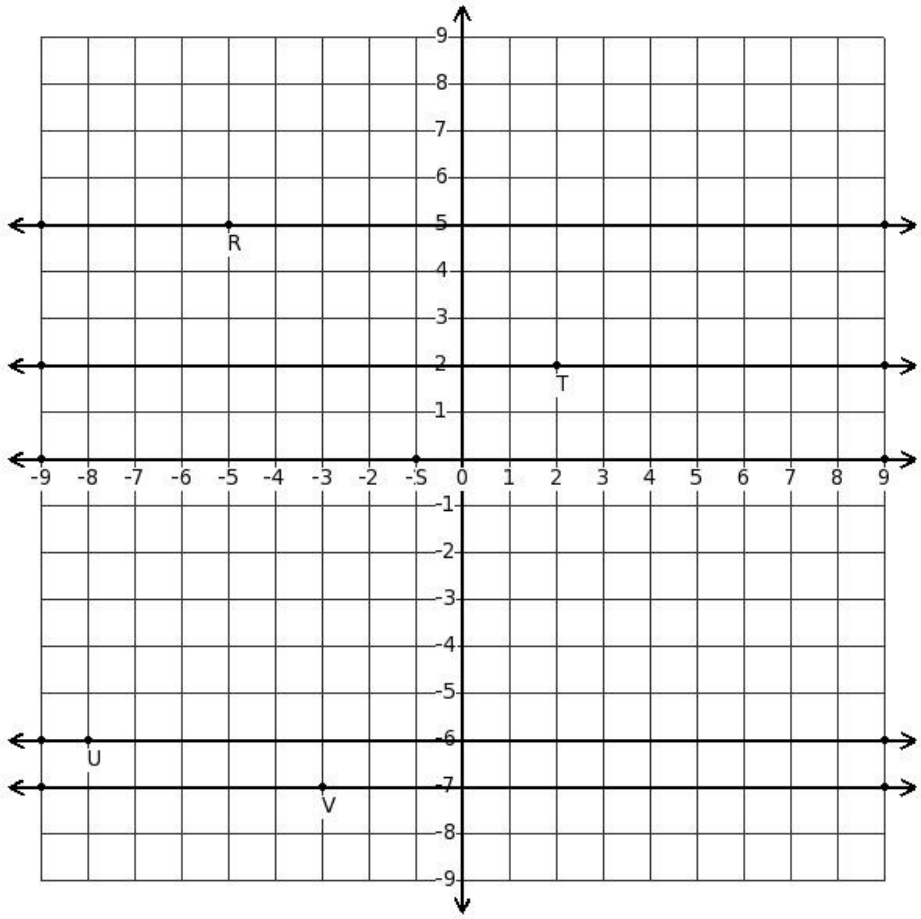
(i) $4x=(-7)$ (ii) $x=(-6)$ (iii) $x=(-7)$ (iv) $x=(-8)$ (v) $y=(-7)$

10. Solve $\begin{matrix}(-12x-3y-3)=0\\(11x+5y+14)=0\end{matrix}$



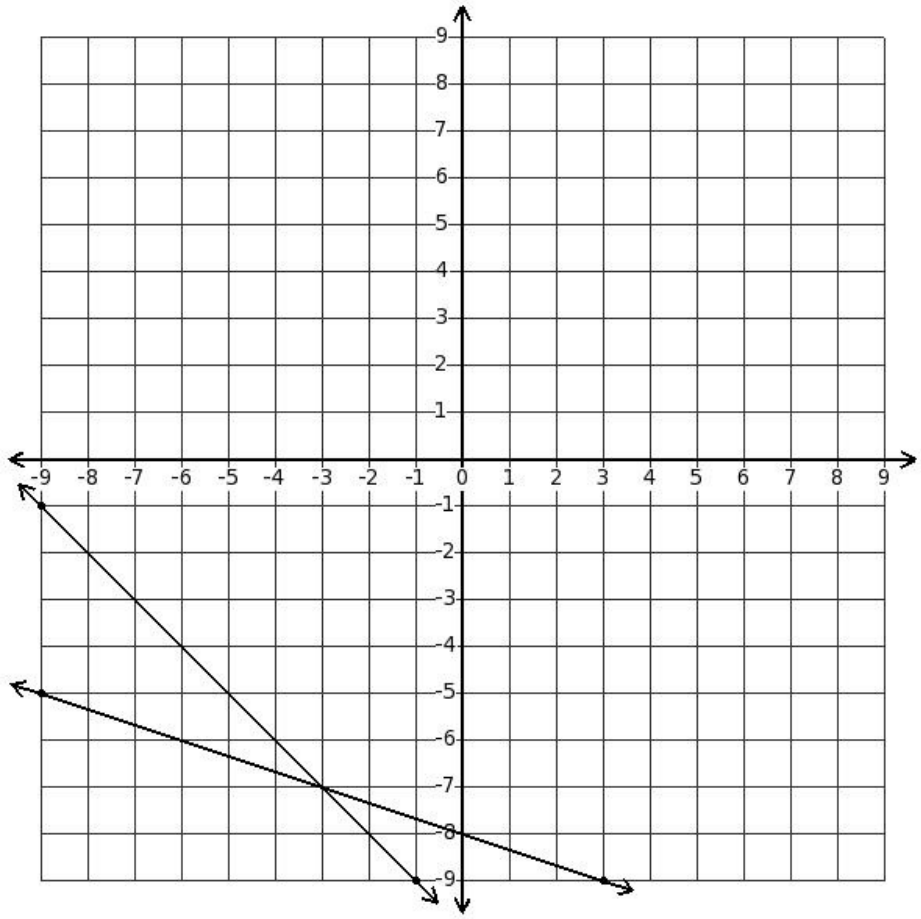
(i) $(3,6)$ (ii) $(1,(-5))$ (iii) $(3,(-3))$ (iv) $(7,8)$ (v) $((-1),(-7))$

11. Which of the displayed lines represent the equation $y=5$



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

12. Solve $\begin{matrix}(-x-y-10)=0\\(x+3y+24)=0\end{matrix}$



(i) $((-4),(-6))$ (ii) $((-1),(-5))$ (iii) $((-2),(-8))$ (iv) $((-5),(-9))$ (v) $((-3),(-7))$

13. Find the set of points satisfying the equation $(5x+9y-3)=0$

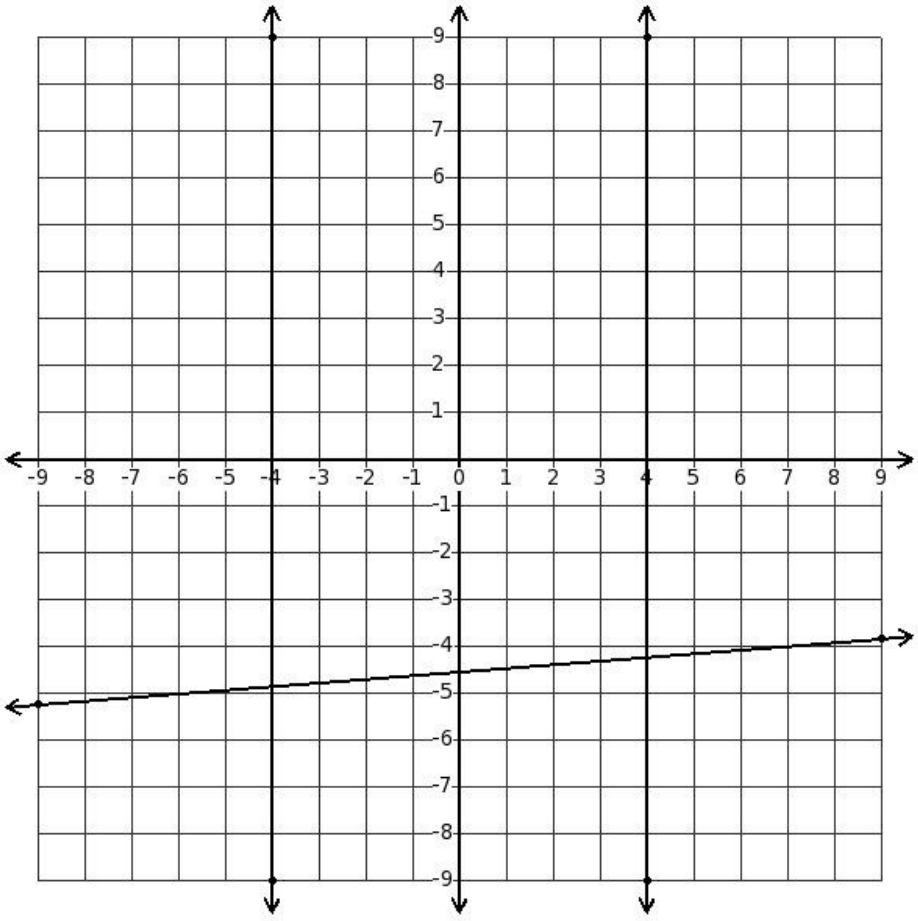
(i) $((-2),\frac{13}{9}),((-1),\frac{8}{9}),(0,\frac{1}{3}),(1,(-\frac{2}{9})),(2,(-\frac{7}{9}))$ (ii) $((-2),\frac{13}{9}),((-1),\frac{8}{9}),(1,(-\frac{2}{3})),(1,(-\frac{2}{9})),(2,(-\frac{7}{9}))$

(iii) $((-2),\frac{13}{9}),((-1),\frac{8}{9}),(0,\frac{1}{3}),(0,\frac{7}{9}),(2,(-\frac{7}{9}))$

(iv) $((-2),\frac{13}{9}),((-1),\frac{8}{9}),((-2),(-\frac{5}{3})),(1,(-\frac{2}{9})),(2,(-\frac{7}{9}))$

(v) $((-2),\frac{13}{9}),((-1),\frac{8}{9}),(0,\frac{1}{3}),(1,(-\frac{2}{9})),(4,\frac{11}{9})$

14. Solve $\begin{matrix}(x-4)=0\\(x+4)=0\end{matrix}$



(i) $(5,(-6))$ (ii) No solution (iii) $(7,(-4))$ (iv) Infinite solutions (v) $((-6),(-5))$

15. Find the set of points satisfying the equation $y=(-\frac{15}{7}x)$

(i) $((-2),\frac{30}{7}),((-1),\frac{15}{7}),(0,0),(1,(-\frac{15}{7})),(2,(-\frac{30}{7}))$ (ii) $((-2),\frac{30}{7}),((-1),\frac{15}{7}),(0,0),(0,(-\frac{8}{7})),(2,(-\frac{30}{7}))$

(iii) $((-2),\frac{30}{7}),((-1),\frac{15}{7}),(1,(-1)),(1,(-\frac{15}{7})),(2,(-\frac{30}{7}))$

(iv) $((-2),\frac{30}{7}),((-1),\frac{15}{7}),((-2),(-2)),(1,(-\frac{15}{7})),(2,(-\frac{30}{7}))$

(v) $((-2),\frac{30}{7}),((-1),\frac{15}{7}),(0,0),(1,(-\frac{15}{7})),(4,(-\frac{16}{7}))$

16. Write the given equation $y=(-8)$ in $ax+by+c=0$ form

(i) $(y+6)=0$ (ii) $8=0$ (iii) $(2y+8)=0$ (iv) $(y+10)=0$ (v) $(y+8)=0$

17. Solve the following pair of equations :

$$\frac{1}{(x+y)} + \frac{3}{(x-y)} = 23$$

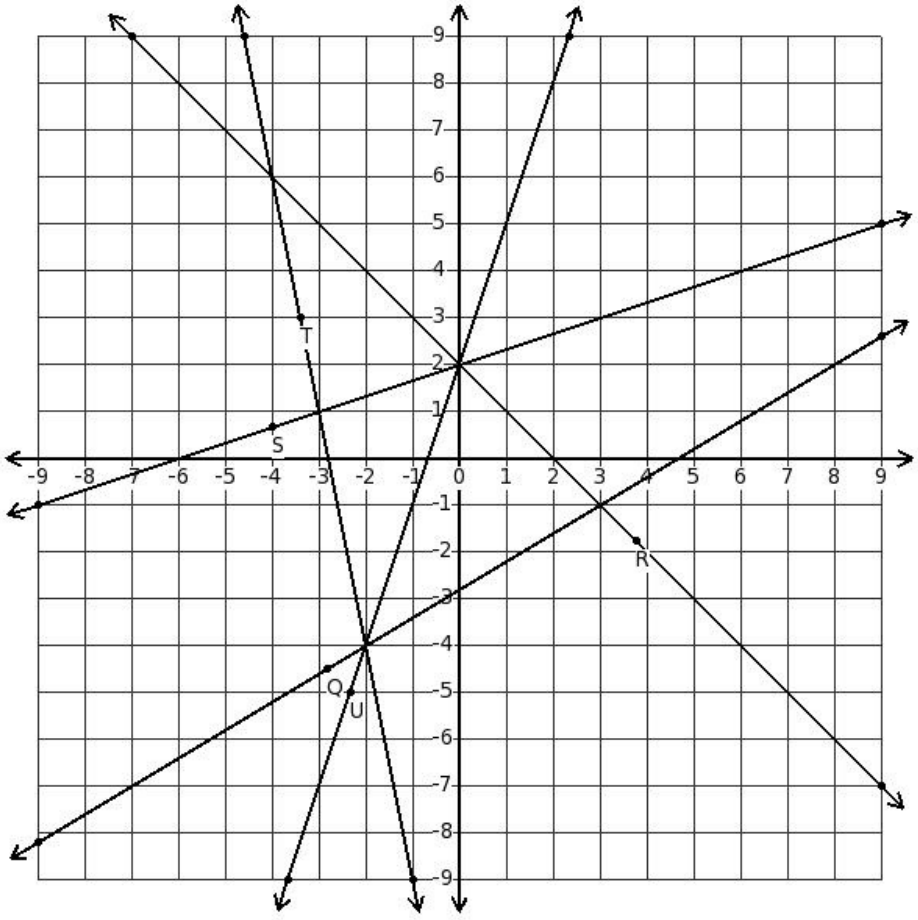
$$-\frac{1}{(x+y)} + \frac{5}{(x-y)} = 17$$

(i) $(\frac{13}{80},(\frac{-1}{26}))$ (ii) $(\frac{3}{16},(\frac{-3}{80}))$ (iii) $(\frac{13}{80},(\frac{-3}{80}))$ (iv) $(\frac{13}{82},(\frac{-3}{80}))$ (v) $(\frac{13}{80},(\frac{-1}{16}))$

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

(i) $(4x+3y-2)=0$ (ii) $x=6$ (iii) $(-11x-16y-29)=0$ (iv) $y=(-\frac{11}{16}x-\frac{15}{8})$ (v) $y=(-6)$

19. Which of the displayed lines represent the equation $(3x-5y-14)=0$?



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

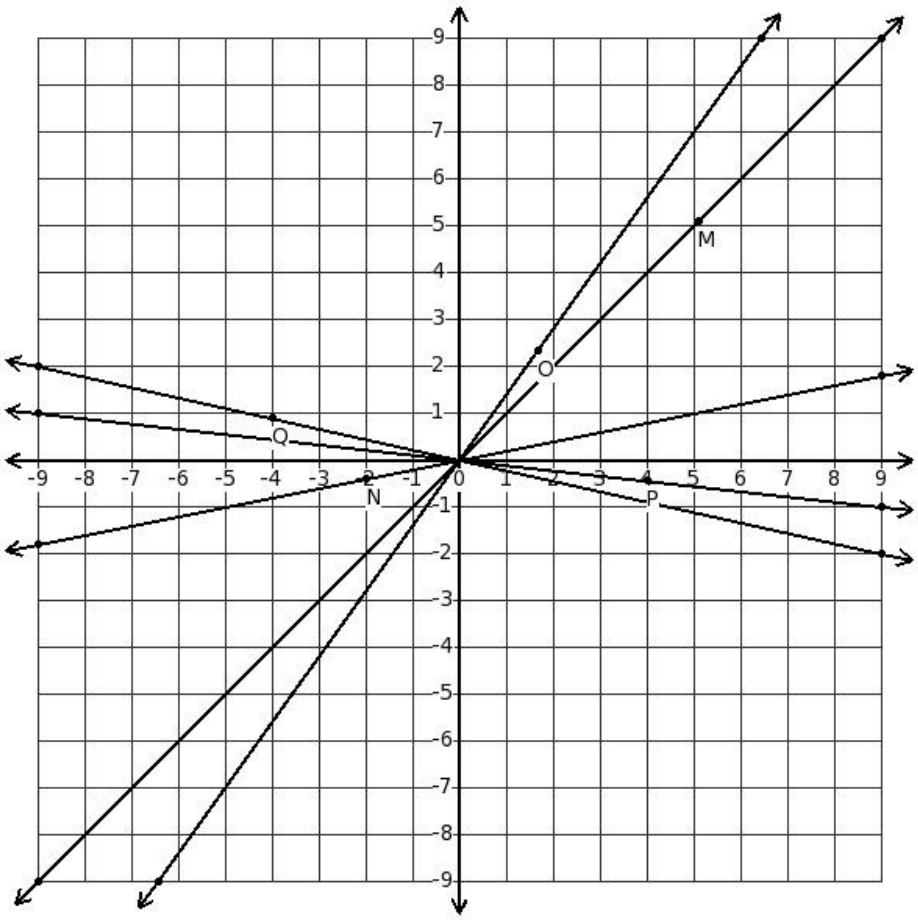
20. Find the set of points satisfying the equation $x=(-\frac{3}{11}y+\frac{13}{11})$

(i) $((-2),\frac{35}{3}),((-1),8),(1,\frac{10}{3}),(1,\frac{2}{3}),(2,(-3))$ (ii) $((-2),\frac{35}{3}),((-1),8),(0,\frac{13}{3}),(0,\frac{5}{3}),(2,(-3))$

(iii) $((-2),\frac{35}{3}),((-1),8),((-2),\frac{7}{3}),(1,\frac{2}{3}),(2,(-3))$ (iv) $((-2),\frac{35}{3}),((-1),8),(0,\frac{13}{3}),(1,\frac{2}{3}),(2,(-3))$

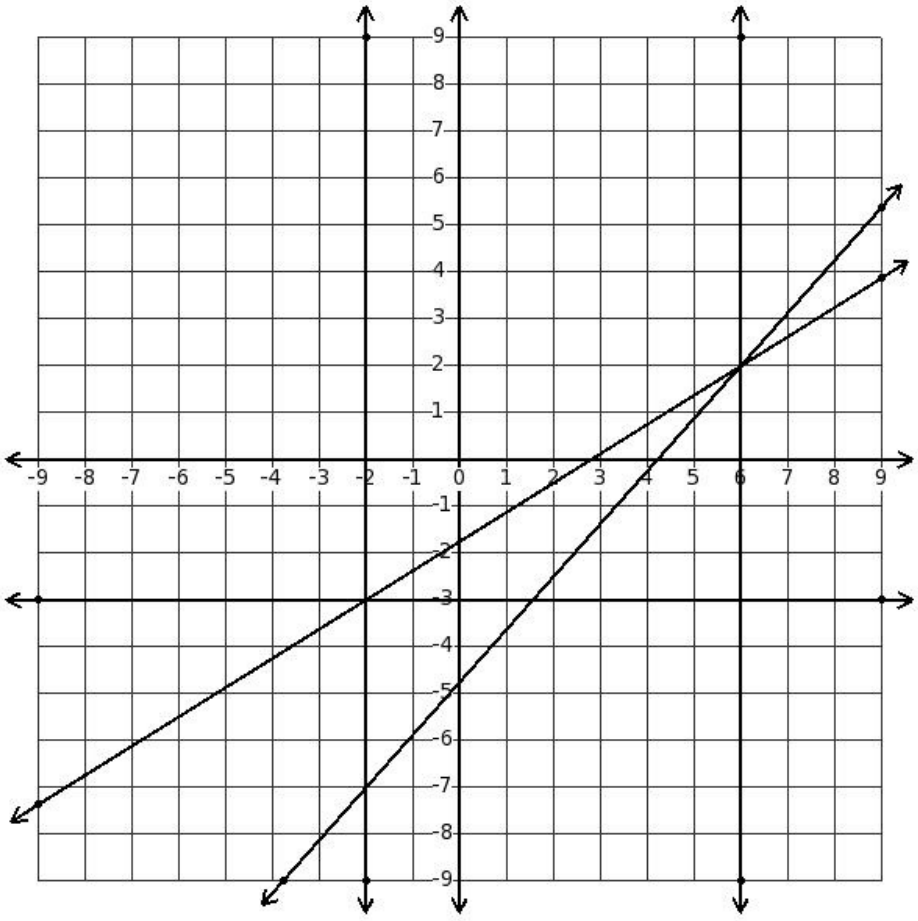
(v) $((-2),\frac{35}{3}),((-1),8),(0,\frac{13}{3}),(1,\frac{2}{3}),(4,(-1))$

21. Which of the displayed lines represent the equation $y=x$



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

22. Solve $\begin{matrix}(-4x-8)=0\\(y+3) \ = \ 0\end{matrix}$



(i) $(6,2)$ (ii) $((-2),(-3))$ (iii) $(0,(-3))$ (iv) $((-2),0)$ (v) $((-2),(-7))$

23. Which of the following equations satisfy the given points $(4,(-2)),(4,(-1)),(4,0),(4,1),(4,2)$?

(i) $(-10x-4y+6)=0$ (ii) $x=(\frac{5}{2}y+\frac{53}{2})$ (iii) $x=4$ (iv) $(21x+9y-7)=0$ (v) $y=(-9)$

Solve the following pair of equations :

24.

$$\frac{14}{x} - 8y = (-42)$$

$$\frac{1}{x} - 3y = 14$$

(i) $((\frac{-1}{7}),-7)$ (ii) $((\frac{-1}{7}),-9)$ (iii) $((\frac{-3}{7}),-7)$ (iv) $((\frac{-1}{7}),-8)$ (v) $((\frac{-1}{5}),-7)$

25. A motor boat can travel at a speed of 30.23 m/sec downstream and 0.37 m/sec upstream. What is the speed of the motor boat in still water?

(i) 14.30 m/sec (ii) 13.30 m/sec (iii) 17.30 m/sec (iv) 15.30 m/sec (v) 16.30 m/sec

Assignment Key

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