EduSahara™ Assignment

Name : Solution of Pair of Linear Equations using Graphs

Chapter : Pair of Linear Equations in Two Variables

Grade : CBSE Grade X

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

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

2. The equation of x-axis is

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

3. The equation of y-axis is

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

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

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

5. Any line parallel to x-axis is

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

6. Any line parallel to y-axis is

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

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

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

8. Which of the following are true ?

   a) Equations of two parallel lines have the same constant and coefficients of x and y will not be same
   b) Equations of two parallel lines differ in the constant and coefficients of x and y will not be same
   c) Equations of two parallel lines have the same constant and coefficients of x and y will be same
   d) Equations of two parallel lines differ in the constant term only, coefficients of x and y will be same

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

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

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

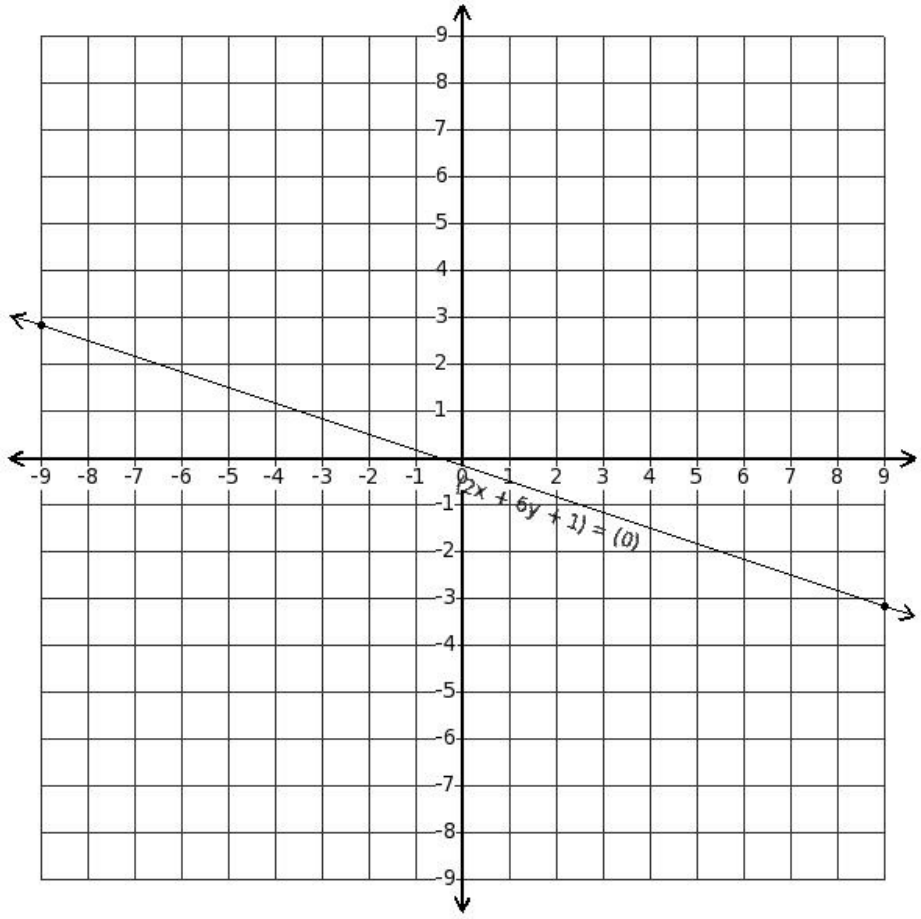
10. Equation of a straight line which is parallel to y-axis (where k is a constant) is

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

11. Write the given equation $y=(-2x+10)$ in $ax+by+c=0$ form

    (i) $(2x+4y-10)=0$ (ii) $(2x+y-10)=0$ (iii) $(3x+y-10)=0$ (iv) $(2x-2y-10)=0$ (v) $(x+y-10)=0$

12. Find the equation parallel to the given equation

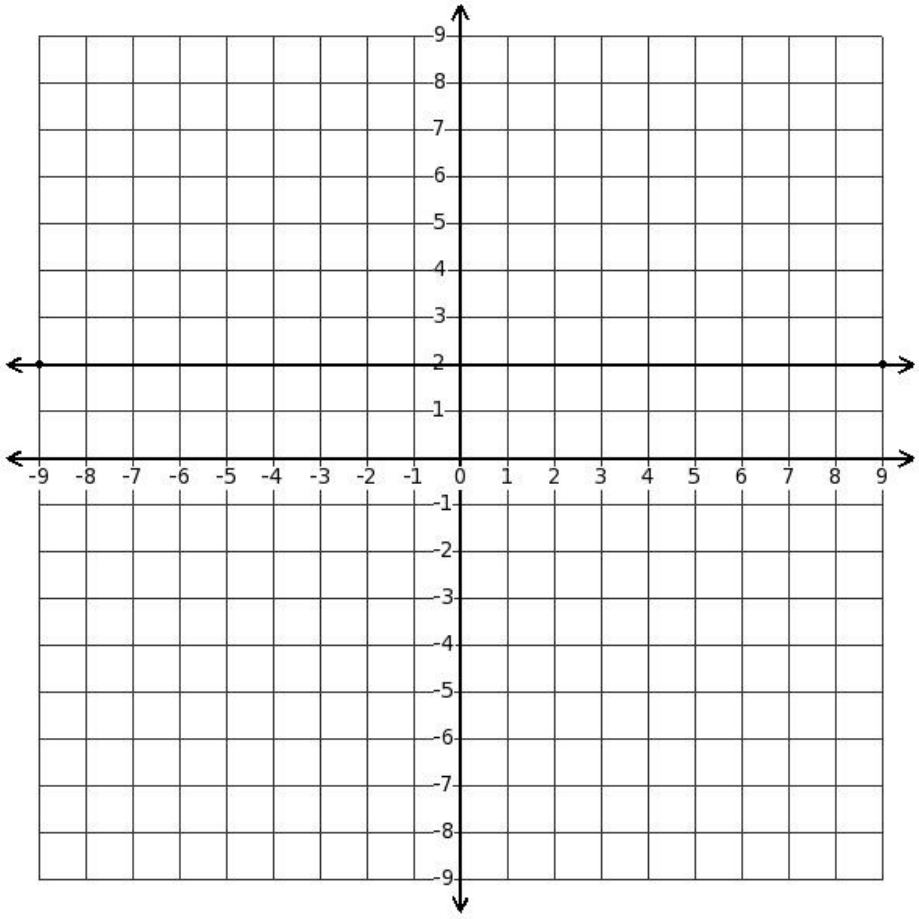


(i) $(4x+3y+50)=0$ (ii) $(-6x+2y+3)=0$ (iii) $(-2x+3y+22)=0$ (iv) $(2x+6y-1)=0$

13. Find the equation parallel to the given equation $(7x-2y+6)=0$

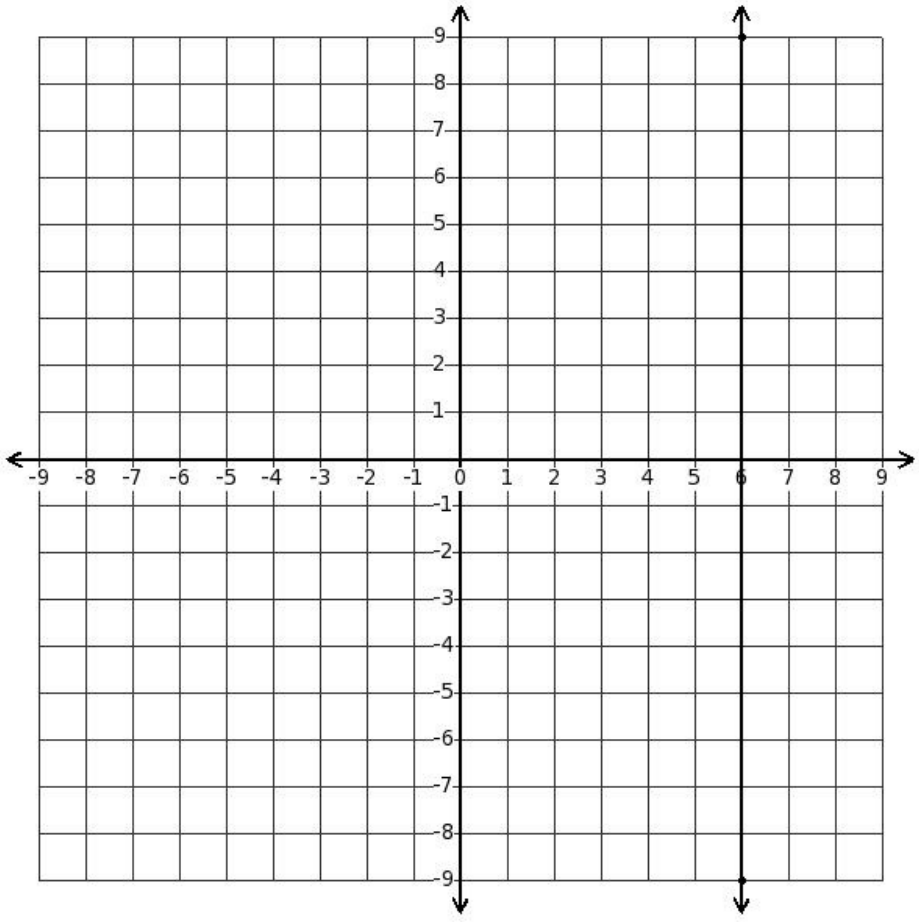
(i) $(-5x+7y-89)=0$ (ii) $(-9x+2y-88)=0$ (iii) $(7x-2y+9)=0$ (iv) $(2x+7y-51)=0$

14. Find the equation of the displayed line



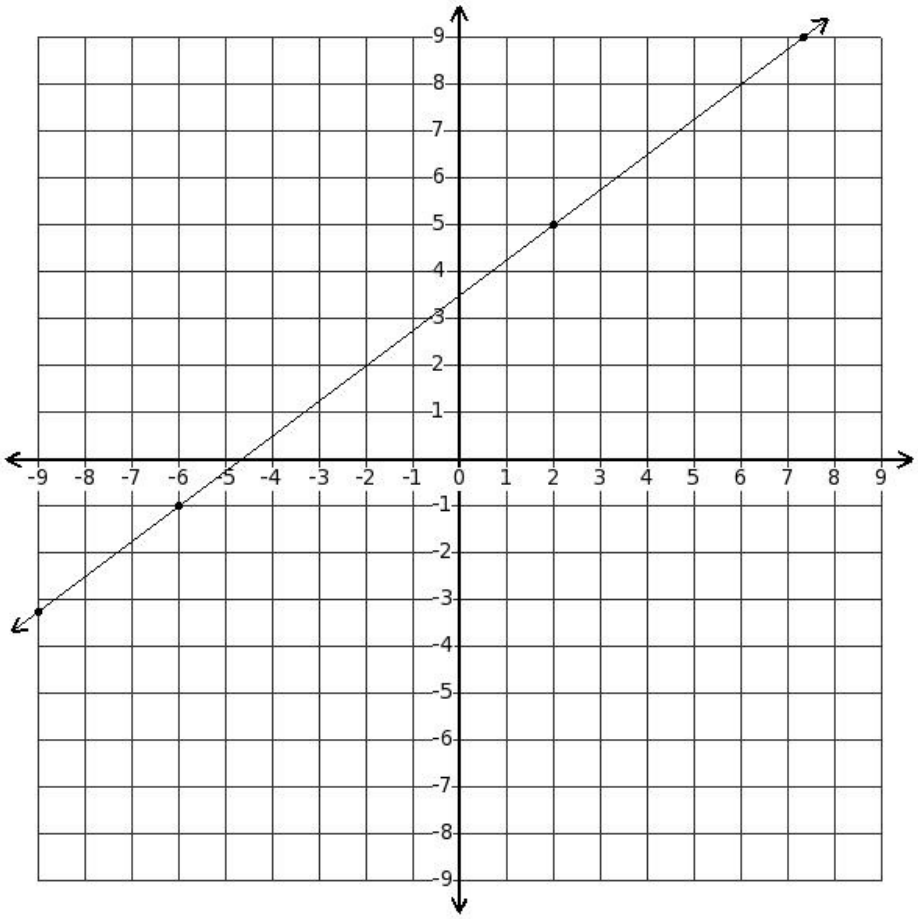
(i) $y=3$ (ii) $4y=2$ (iii) $y=2$ (iv) $x=2$ (v) $y=1$

15. Find the equation of the displayed line



(i) $4x=6$ (ii) $x=6$ (iii) $x=7$ (iv) $x=5$ (v) $y=6$

16. Find the equation of the line passing through the points $((-6),(-1))$ and $(2,5)$



(i) $(5x-8y+28)=0$ (ii) $(-3x+4y-18)=0$ (iii) $(7x-8y+28)=0$ (iv) $(-3x+4y-11)=0$

(v) $(6x-8y+28)=0$

17. The equation of the x-axis is

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

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

18. Find the equation of a straight line parallel to x-axis and passing through the point $(2,(-4))$

(i) $y=(-1)$ (ii) $x=5$ (iii) $x=2$ (iv) $y=(-4)$ (v) $y=(-5)$

19. Find the equation of a straight line parallel to y-axis and passing through the point $((-4),1)$

(i) $x=(-1)$ (ii) $y=1$ (iii) $y=4$ (iv) $x=(-4)$ (v) $x=(-5)$

20. Find the value of k such that $(10x-y+8)=0$ and $(kx+y+22)=0$ are parallel to each other

(i) -10 (ii) -8 (iii) -9 (iv) -13 (v) -11

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

(i) $(6x+2y-22)=0,(6x+2y-50)=0$ (ii) $(6x+2y-22)=0,(4x+2y-36)=0$

(iii) $(6x+2y-22)=0,(-4x+3y+11)=0$ (iv) $(6x+2y-22)=0,(-x+3y-13)=0$

22. Find the set of points satisfying the equation $(-17x-12y+45)=0$

(i) $((-2),\frac{79}{12}),((-1),\frac{31}{6}),(0,\frac{15}{4}),(0,\frac{10}{3}),(2,\frac{11}{12})$ (ii) $((-2),\frac{79}{12}),((-1),\frac{31}{6}),(0,\frac{15}{4}),(1,\frac{7}{3}),(2,\frac{11}{12})$

(iii) $((-2),\frac{79}{12}),((-1),\frac{31}{6}),(0,\frac{15}{4}),(1,\frac{7}{3}),(4,\frac{35}{12})$ (iv) $((-2),\frac{79}{12}),((-1),\frac{31}{6}),((-2),\frac{7}{4}),(1,\frac{7}{3}),(2,\frac{11}{12})$

(v) $((-2),\frac{79}{12}),((-1),\frac{31}{6}),(1,\frac{11}{4}),(1,\frac{7}{3}),(2,\frac{11}{12})$

23. Find the set of points satisfying the equation $y=(\frac{9}{2}x+23)$

(i) $((-2),14),((-1),\frac{37}{2}),(0,23),(0,\frac{57}{2}),(2,32)$ (ii) $((-2),14),((-1),\frac{37}{2}),(0,23),(1,\frac{55}{2}),(2,32)$

(iii) $((-2),14),((-1),\frac{37}{2}),(1,22),(1,\frac{55}{2}),(2,32)$ (iv) $((-2),14),((-1),\frac{37}{2}),((-2),21),(1,\frac{55}{2}),(2,32)$

(v) $((-2),14),((-1),\frac{37}{2}),(0,23),(1,\frac{55}{2}),(4,34)$

24. Find the set of points satisfying the equation $x=(\frac{1}{10}y-\frac{31}{10})$

(i) $((-2),11),((-1),21),((-2),29),(1,41),(2,51)$ (ii) $((-2),11),((-1),21),(0,31),(1,41),(2,51)$

(iii) $((-2),11),((-1),21),(0,31),(0,42),(2,51)$ (iv) $((-2),11),((-1),21),(0,31),(1,41),(4,53)$

(v) $((-2),11),((-1),21),(1,30),(1,41),(2,51)$

25. Find the set of points satisfying the equation $y=(-\frac{7}{2}x)$

(i) $((-2),7),((-1),\frac{7}{2}),(1,(-1)),(1,(-\frac{7}{2})),(2,(-7))$ (ii) $((-2),7),((-1),\frac{7}{2}),(0,0),(0,(-\frac{5}{2})),(2,(-7))$

(iii) $((-2),7),((-1),\frac{7}{2}),((-2),(-2)),(1,(-\frac{7}{2})),(2,(-7))$ (iv) $((-2),7),((-1),\frac{7}{2}),(0,0),(1,(-\frac{7}{2})),(4,(-5))$

(v) $((-2),7),((-1),\frac{7}{2}),(0,0),(1,(-\frac{7}{2})),(2,(-7))$

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

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

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

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

27. Find the set of points satisfying the equation $y=2$

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

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

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

28. Find the set of points satisfying the equation $x=(-2)$

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

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

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

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

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

29. Which of the following equations satisfy the given points $((-2),\frac{30}{11}),((-1),\frac{23}{11}),(0,\frac{16}{11}),(1,\frac{9}{11}),(2,\frac{2}{11})$?

(i) $(3x+6y-2)=0$ (ii) $x=(\frac{7}{11}y+\frac{133}{11})$ (iii) $y=(-8)$ (iv) $y=(-\frac{7}{11}x-\frac{39}{11})$ (v) $(-7x-11y+16)=0$

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

(i) $y=(-\frac{1}{2}x-5)$ (ii) $y=(-3)$ (iii) $(-5x-10y-20)=0$ (iv) $x=(-4)$ (v) $(5x+8y-4)=0$

31. Which of the following equations satisfy the given points $((-2),\frac{13}{18}),((-1),\frac{4}{9}),(0,\frac{1}{6}),(1,(-\frac{1}{9})),(2,(-\frac{7}{18}))$?

(i) $(5x+18y-3)=0$ (ii) $x=(3y-17)$ (iii) $x=7$ (iv) $(-9x-3y+15)=0$ (v) $y=8$

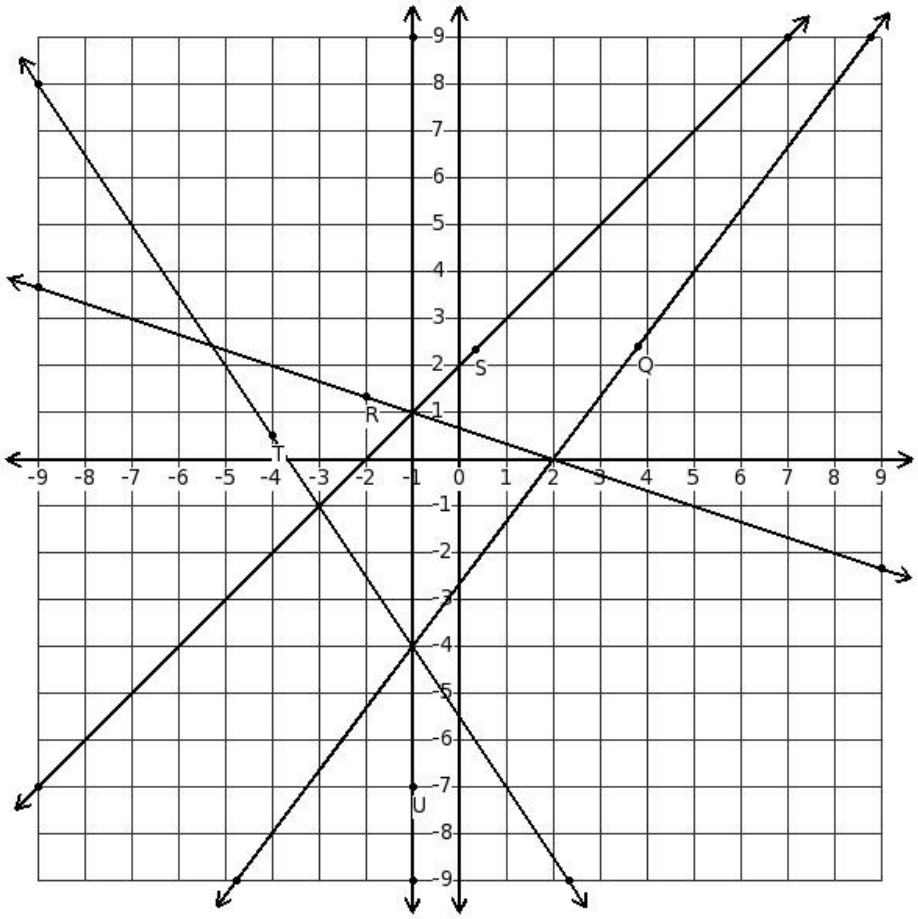
32. Which of the following equations satisfy the given points $((-2),4),((-1),4),(0,4),(1,4),(2,4)$?

(i) $x=(-7)$ (ii) $x=(\frac{1}{2}y-9)$ (iii) $(-6x-12y-18)=0$ (iv) $y=4$ (v) $y=(-\frac{1}{2}x+\frac{1}{2})$

33. Which of the following equations satisfy the given points $((-7),(-2)),((-7),(-1)),((-7),0),((-7),1),((-7),2)$?

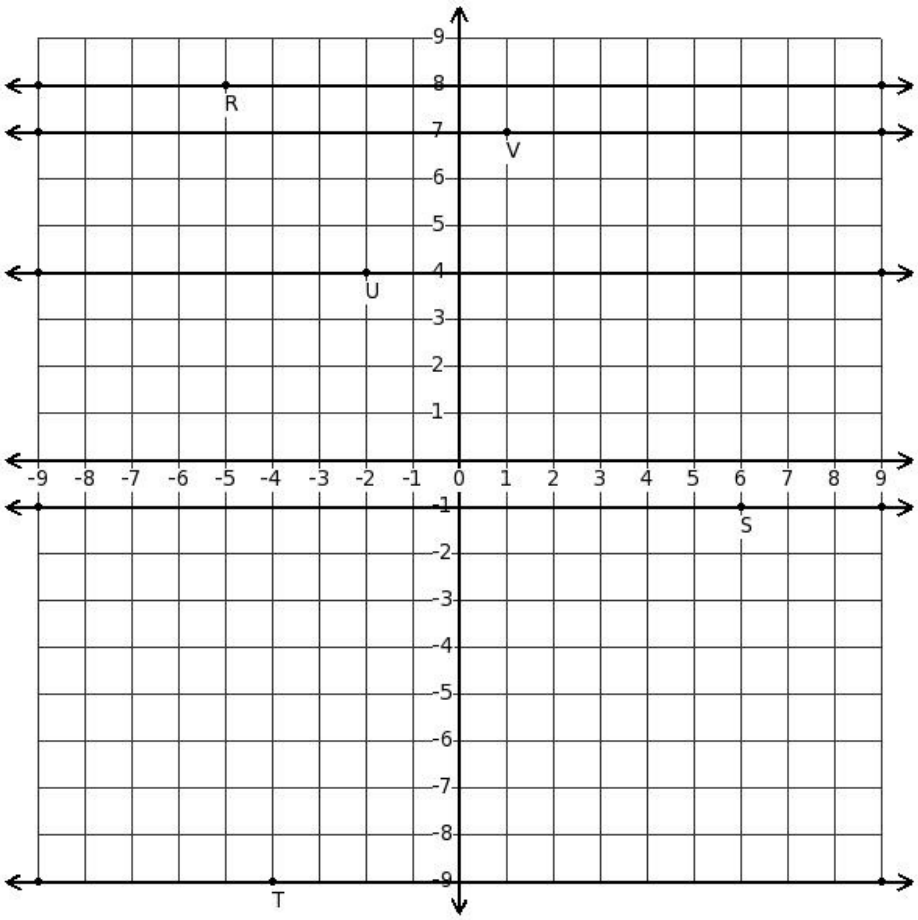
(i) $x=(\frac{1}{2}y-\frac{19}{2})$ (ii) $y=5$ (iii) $x=(-7)$ (iv) $(5x+4y-3)=0$ (v) $y=(-\frac{1}{2}x+\frac{3}{2})$

34. Which of the displayed lines represent the equation $(4x-3y-8)=0$?



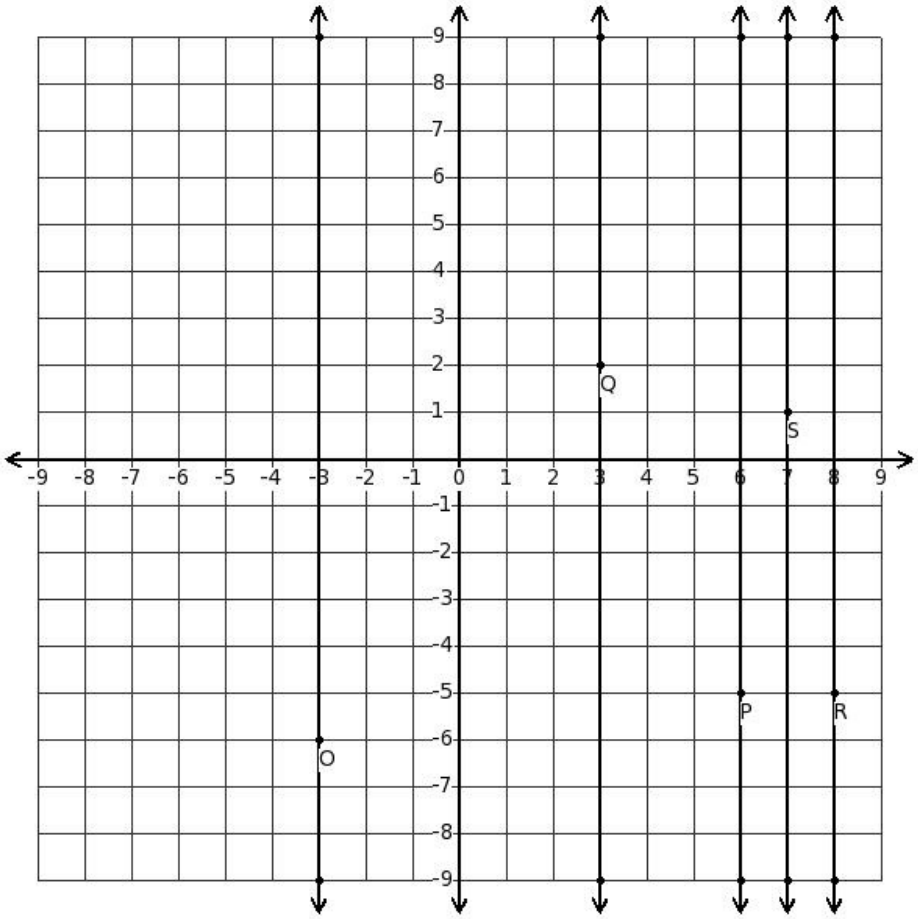
(i) line with point R (ii) line with point S (iii) line with point Q (iv) line with point T (v) line with point U

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



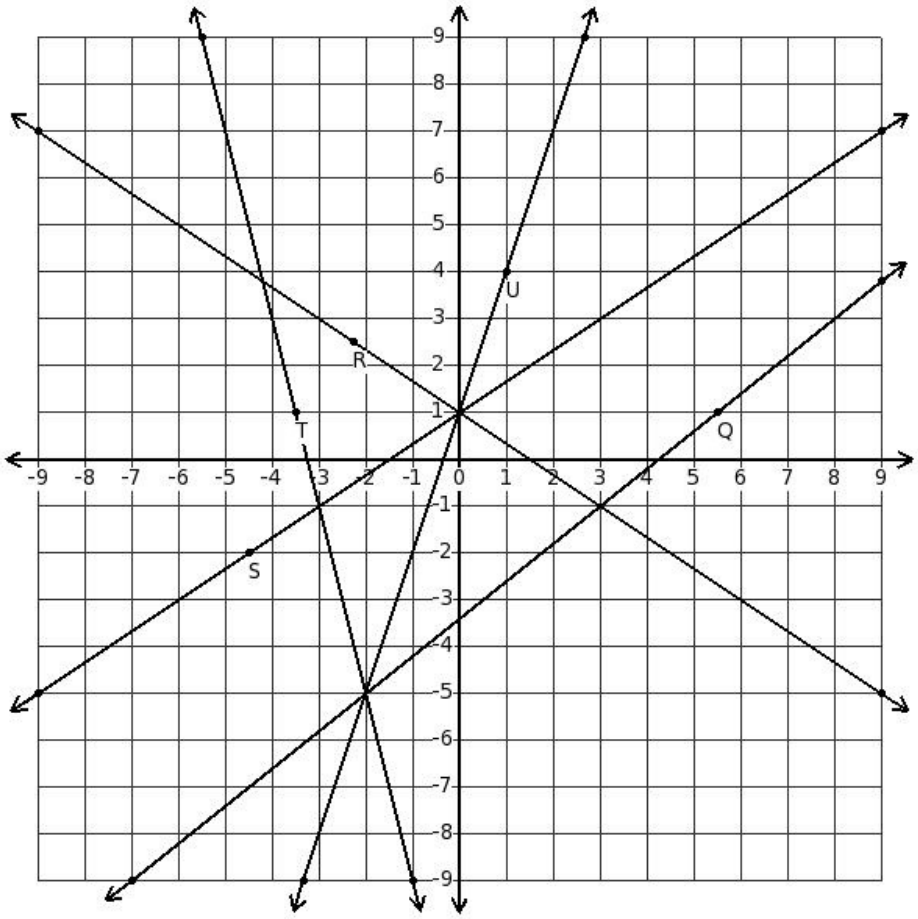
(i) line with point V (ii) line with point S (iii) line with point R (iv) line with point T (v) line with point U

36. Which of the displayed lines represent the equation $x=(-3)$



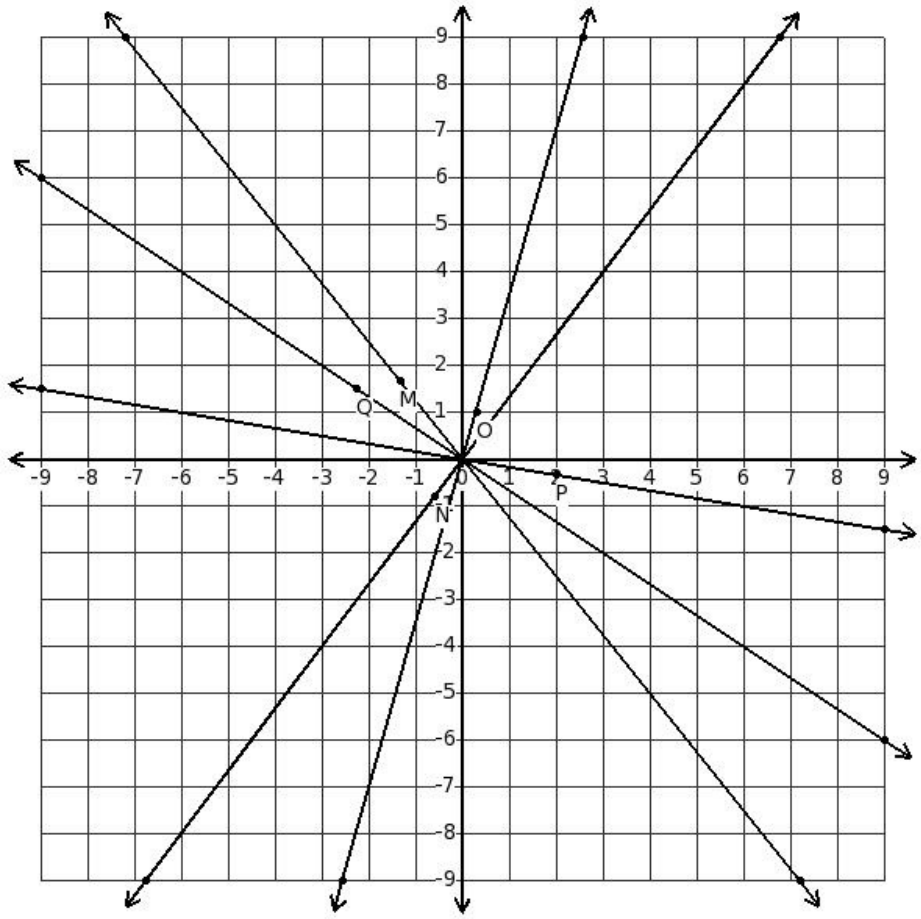
(i) line with point S (ii) line with point Q (iii) line with point P (iv) line with point R (v) line with point O

37. Which of the displayed lines represent the equation $y=(\frac{4}{5}x-\frac{17}{5})$



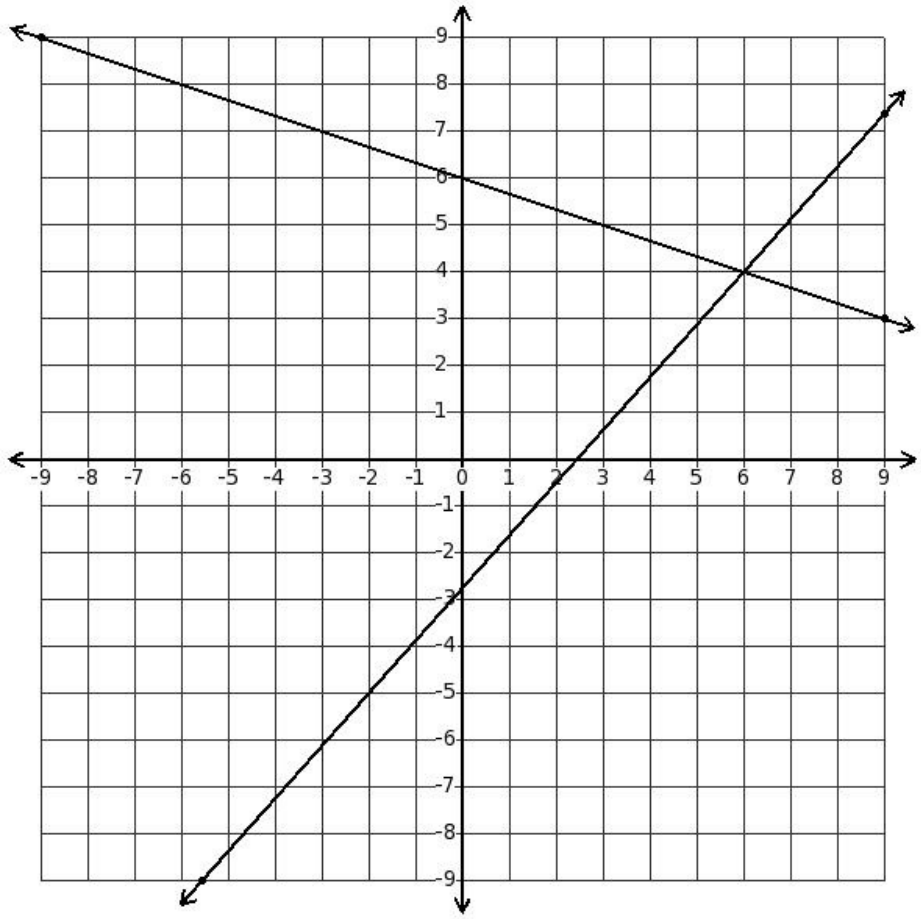
(i) line with point U (ii) line with point Q (iii) line with point R (iv) line with point T (v) line with point S

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



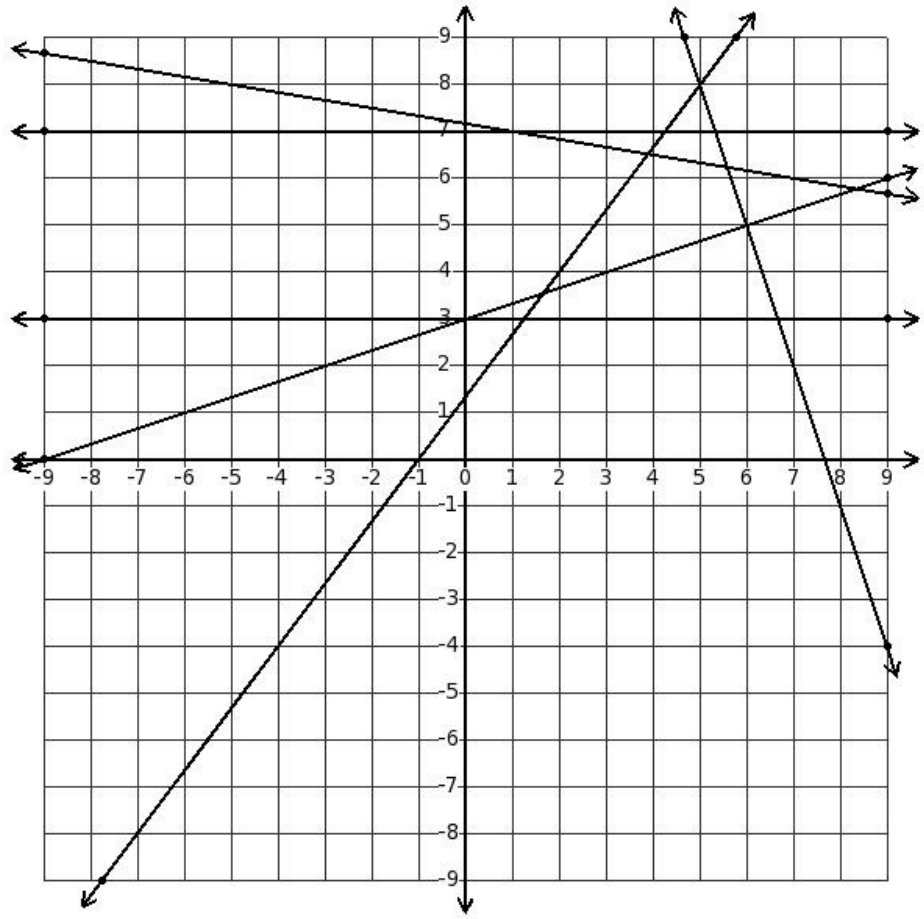
(i) line with point O (ii) line with point M (iii) line with point Q (iv) line with point P (v) line with point N

39. Solve $\begin{matrix}(9x-8y-22)=0\\(x+3y-18)=0\end{matrix}$



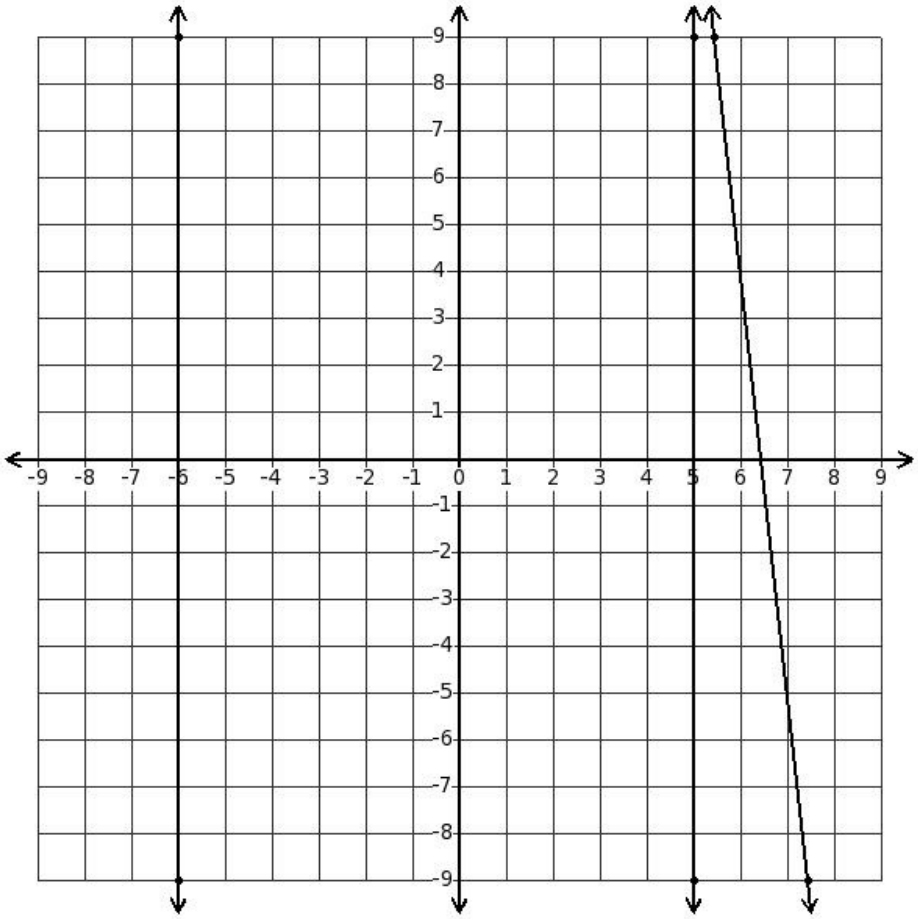
(i) $(8,6)$ (ii) $(6,4)$ (iii) $(5,5)$ (iv) $(4,2)$ (v) $(7,3)$

40. Solve $\begin{matrix}(4y-12) & = & 0\\ (2x-6y+18) & = & 0\end{matrix}$



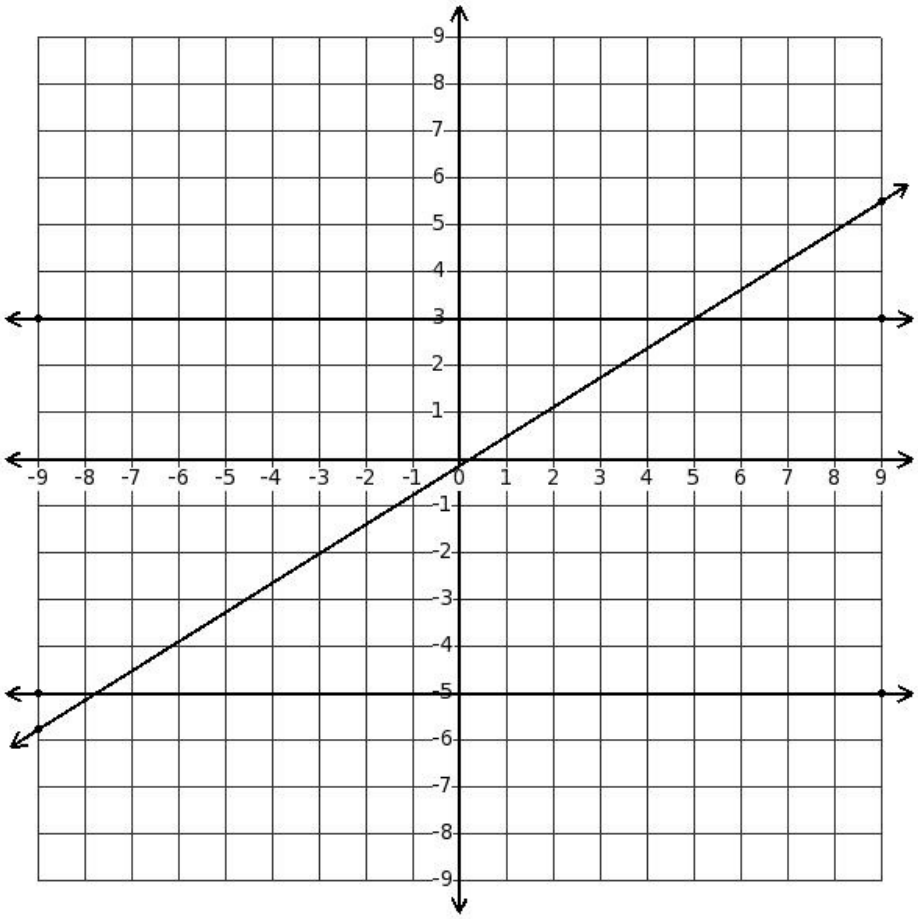
(i) $(0,3)$ (ii) $((-2),1)$ (iii) $(1,7)$ (iv) $(5,8)$ (v) $(2,5)$

41. Solve $(x+6)=0$
$(x-5)=0$



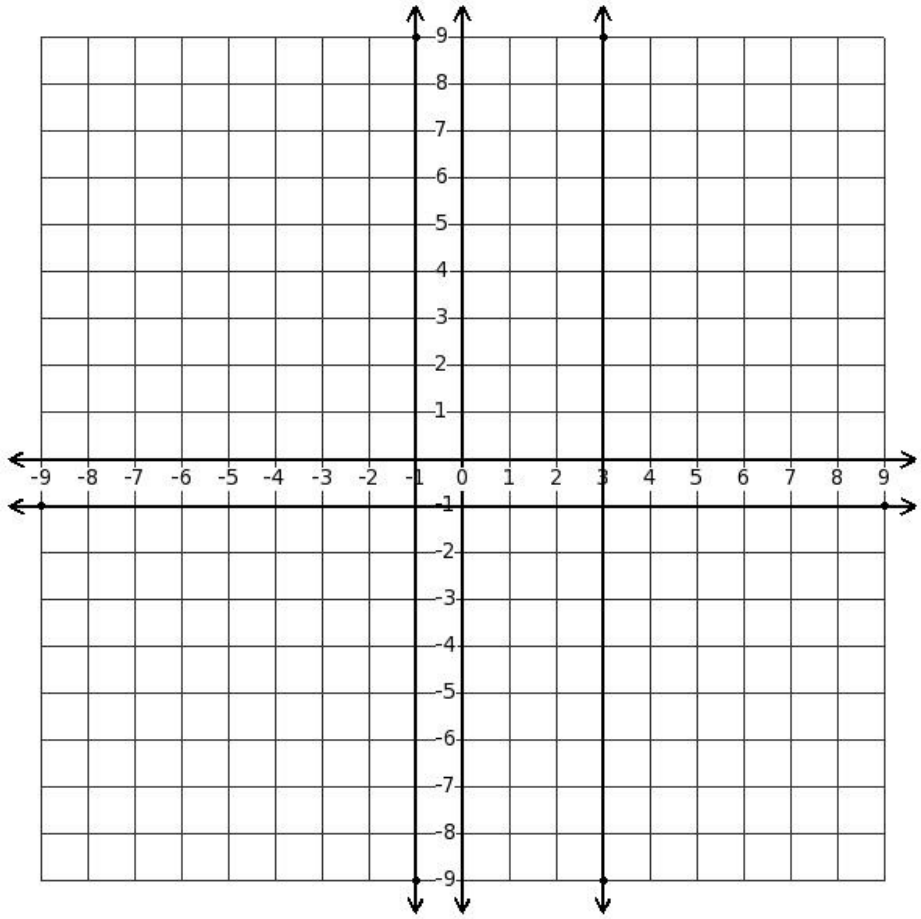
(i) $(6,4)$ (ii) $(5,(-7))$ (iii) No solution (iv) Infinite solutions (v) $(7,(-5))$

42. Solve $(y+5)=0$
$(y-3)=0$



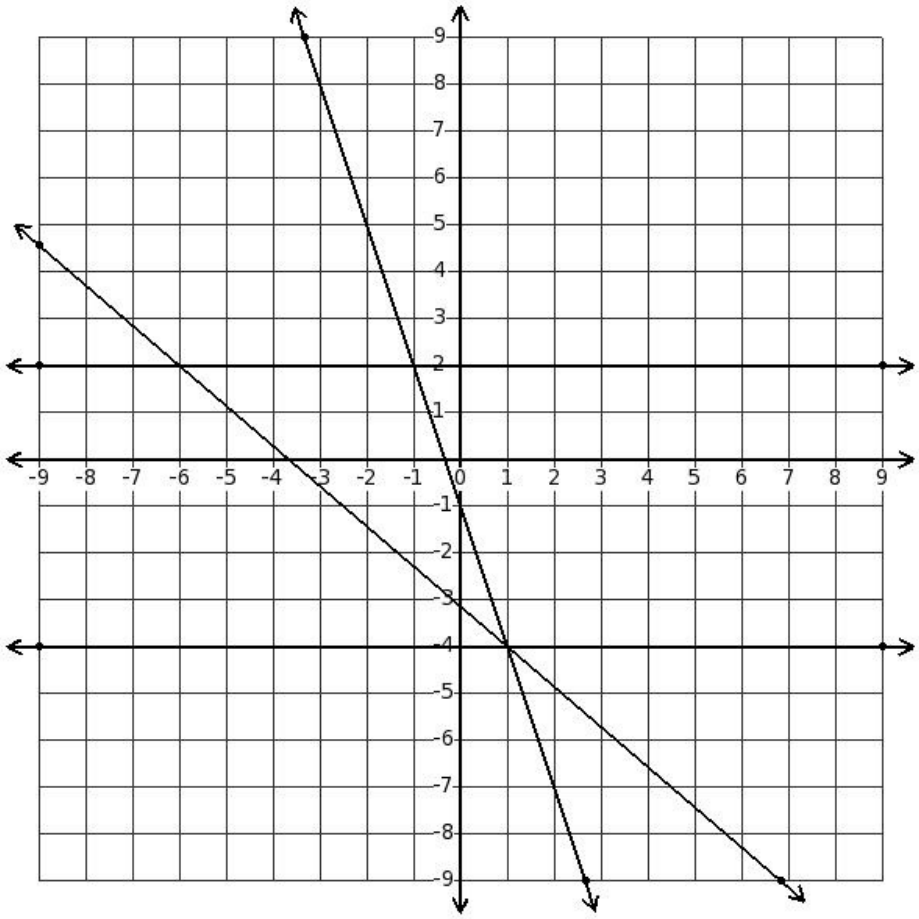
(i) $((-3),(-2))$ (ii) $(5,3)$ (iii) No solution (iv) $(3,1)$ (v) Infinite solutions

43. Solve $\begin{matrix}(7x-21)=0\\(x+1) \ = \ 0\end{matrix}$



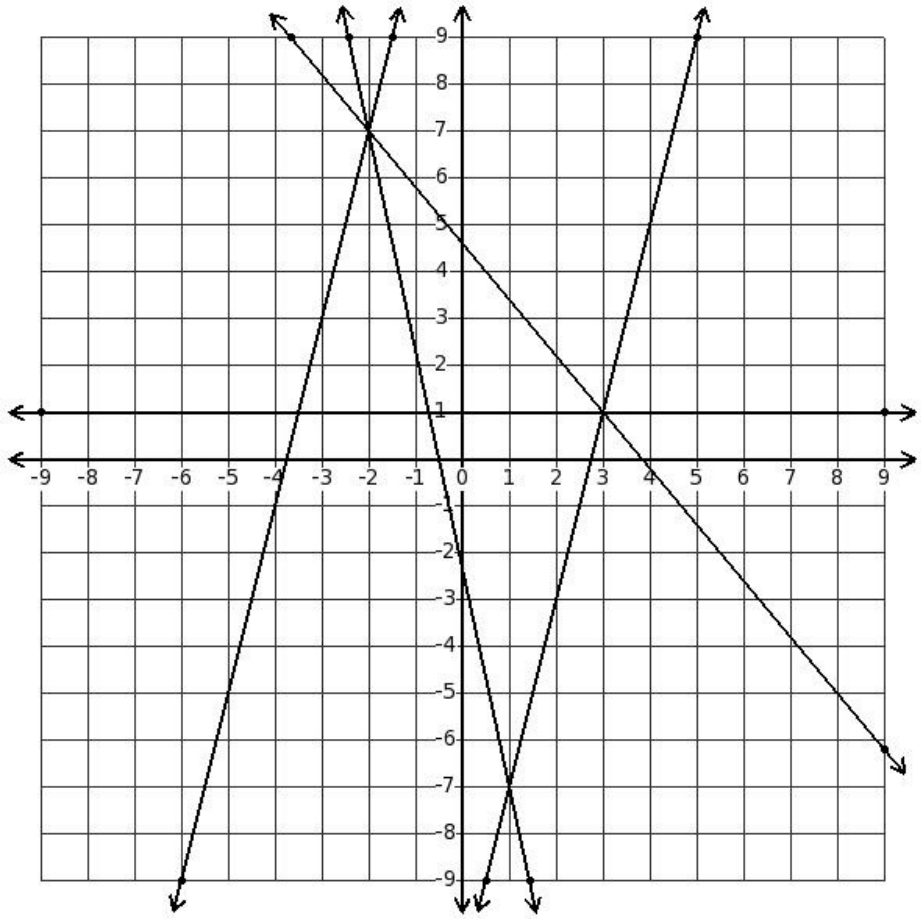
(i) Infinite solutions (ii) $(3,(-1))$ (iii) $(1,(-3))$ (iv) $((-1),(-1))$ (v) No solution

44. Solve $(-5y+10) = 0$
$(-15y+30)=0$



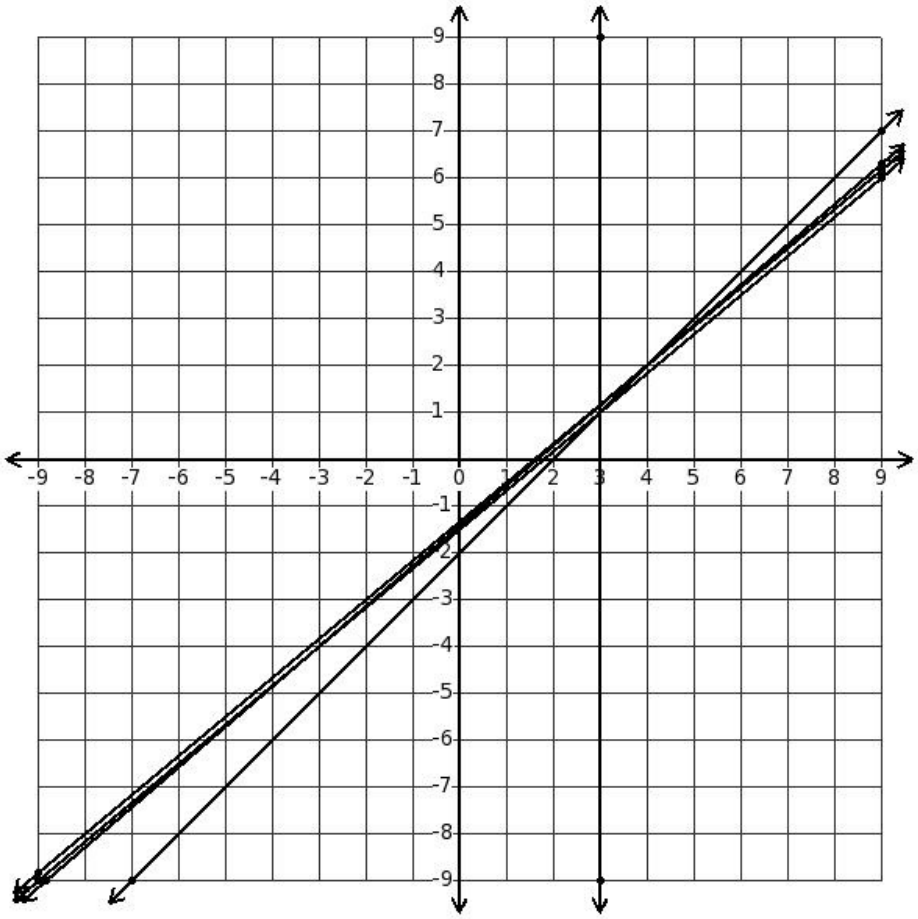
(i) $((-6),2)$ (ii) $((-1),2)$ (iii) Infinite solutions (iv) $(1,(-4))$ (v) No solution

45. Solve $(-8x+2y+22)=0$
$(y-1) \quad = \quad 0$



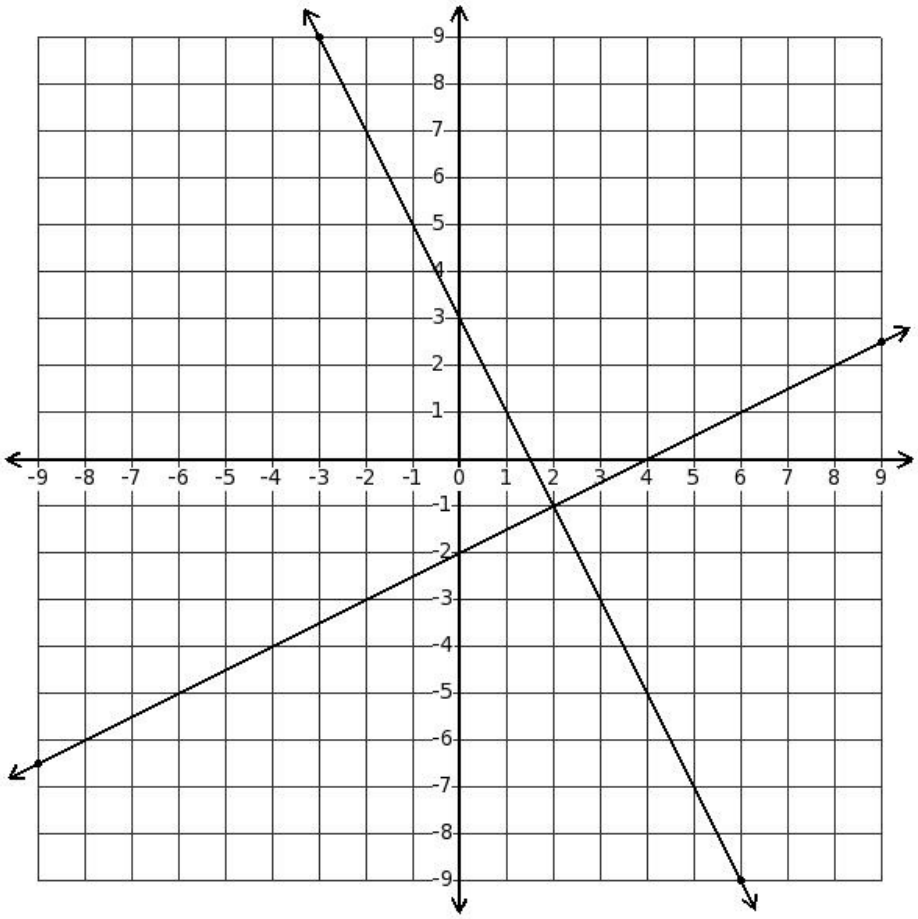
(i) $(3,1)$ (ii) $((-2),7)$ (iii) $(3,0)$ (iv) $(1,(-7))$ (v) $(0,1)$

46. Solve $\begin{matrix}(-5x+6y+9)=0\\(x-3)\quad=\quad 0\end{matrix}$



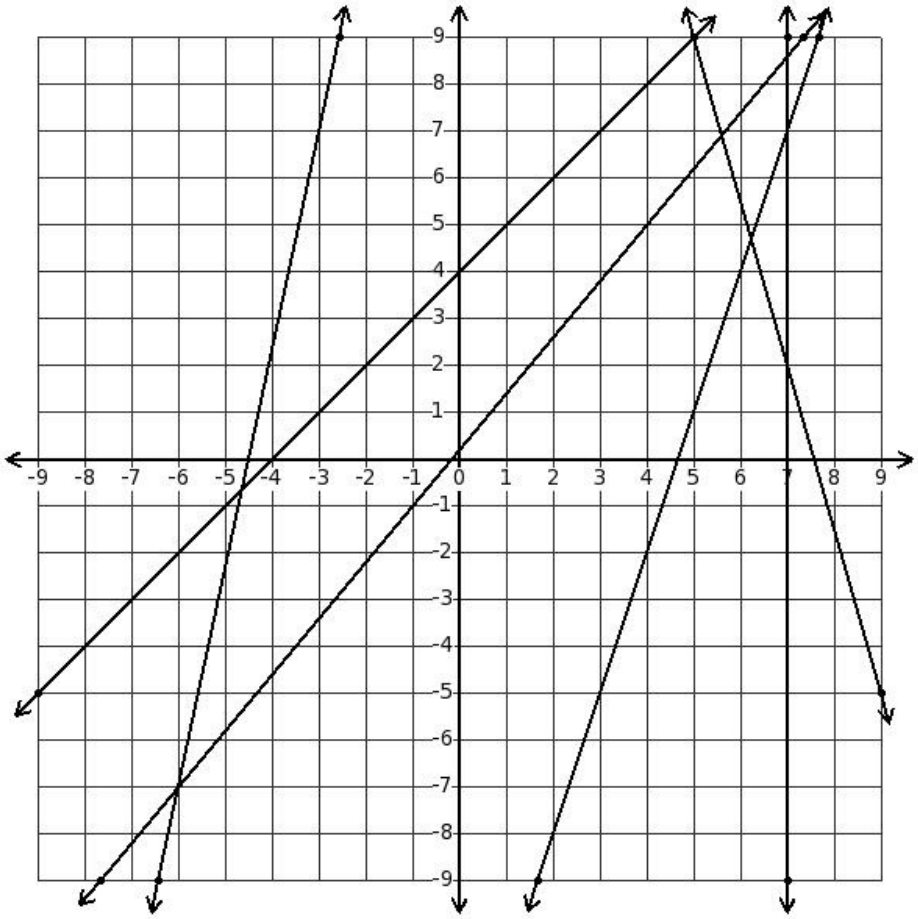
(i) $((-3),(-4))$ (ii) $(4,2)$ (iii) $(0,1)$ (iv) $(3,0)$ (v) $(3,1)$

47. Solve $\begin{matrix}(x-2y-4) & = 0 \\ (-4x-2y+6) & = 0\end{matrix}$



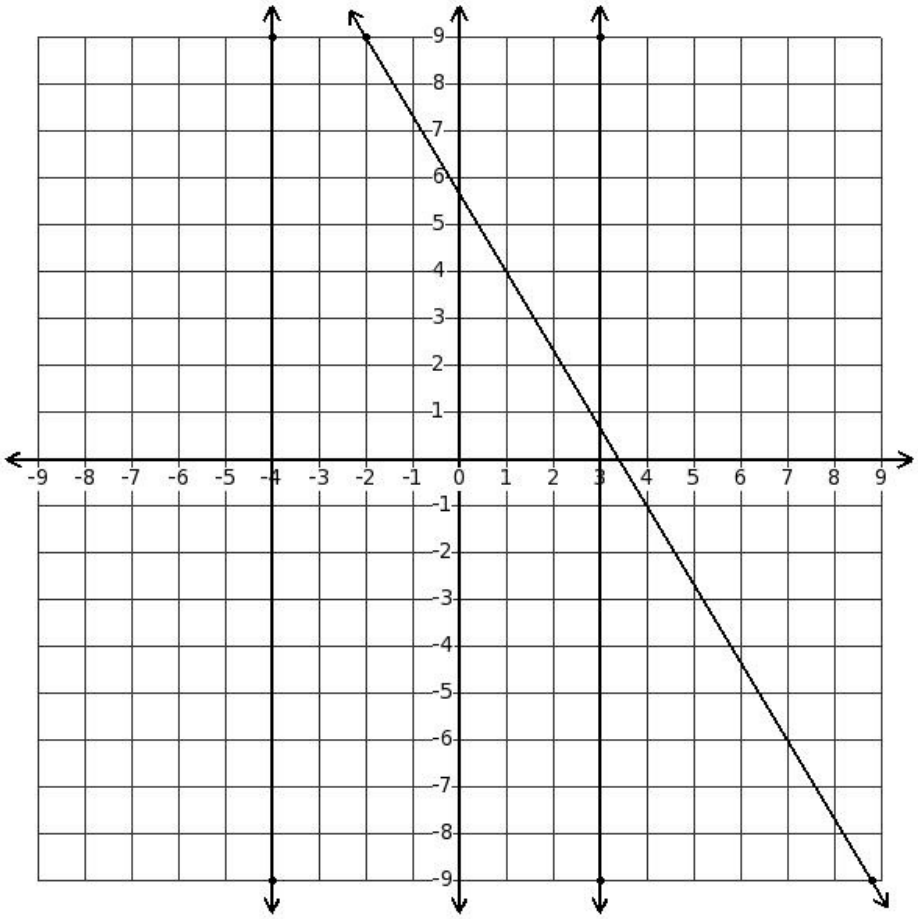
(i) $(2,(-1))$ (ii) $(4,1)$ (iii) $(0,(-3))$ (iv) $(1,0)$ (v) $(3,(-2))$

48. Solve $\begin{matrix}(-14x+3y-63)=0\\(12x-10y+2)\ =0\end{matrix}$



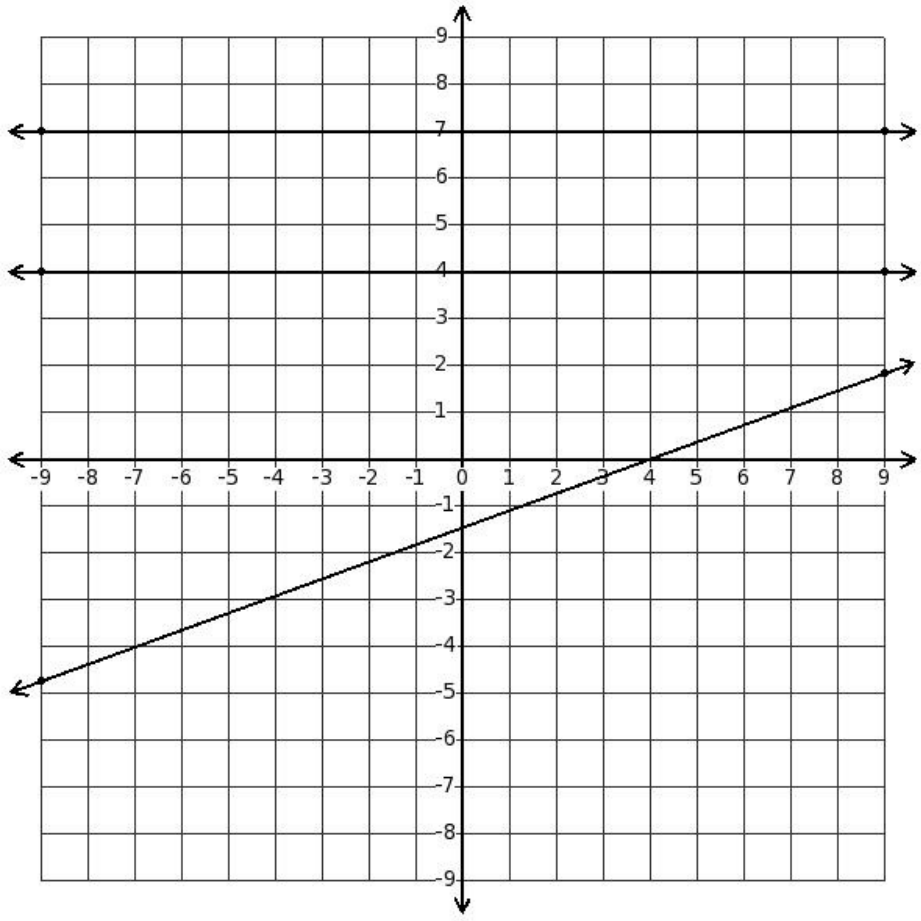
(i) $((-6),(-7))$ (ii) $((-4),(-5))$ (iii) $(5,9)$ (iv) $(7,7)$ (v) $((-8),(-9))$

49. Solve $(x+4)=0$
$(x-3)=0$



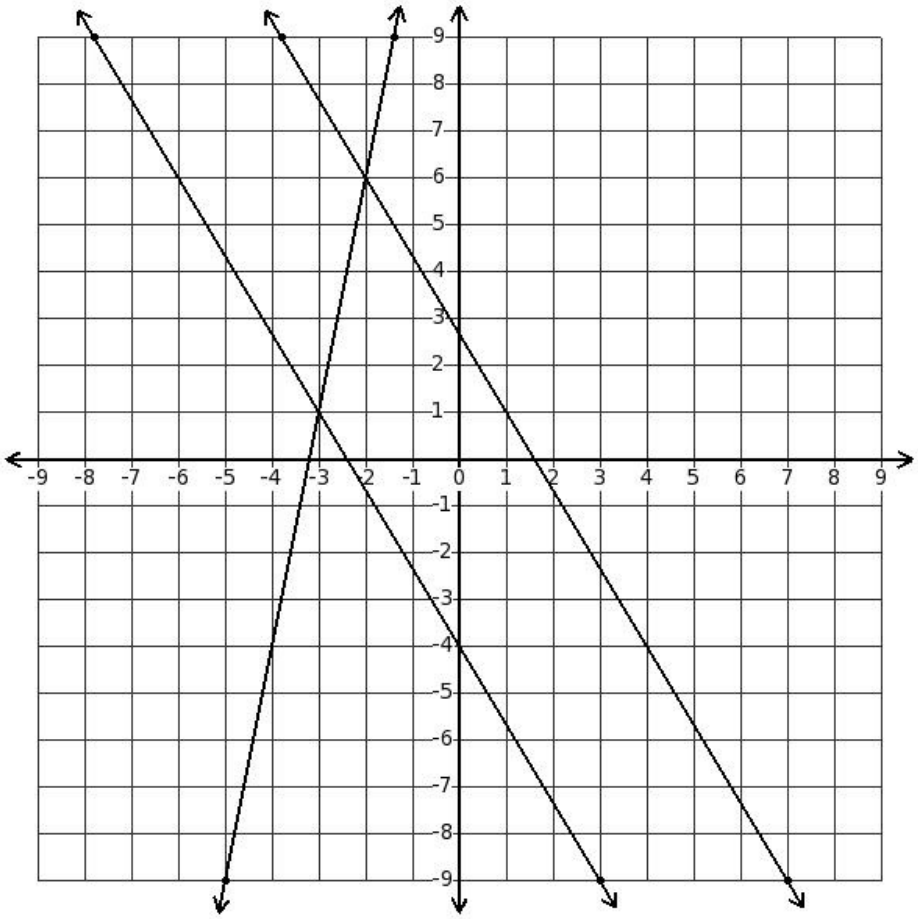
(i) No solution (ii) $(7,(-6))$ (iii) $(1,4)$ (iv) $((-1),2)$ (v) Infinite solutions

50. Solve $(y-4)=0$
$(y-7)=0$



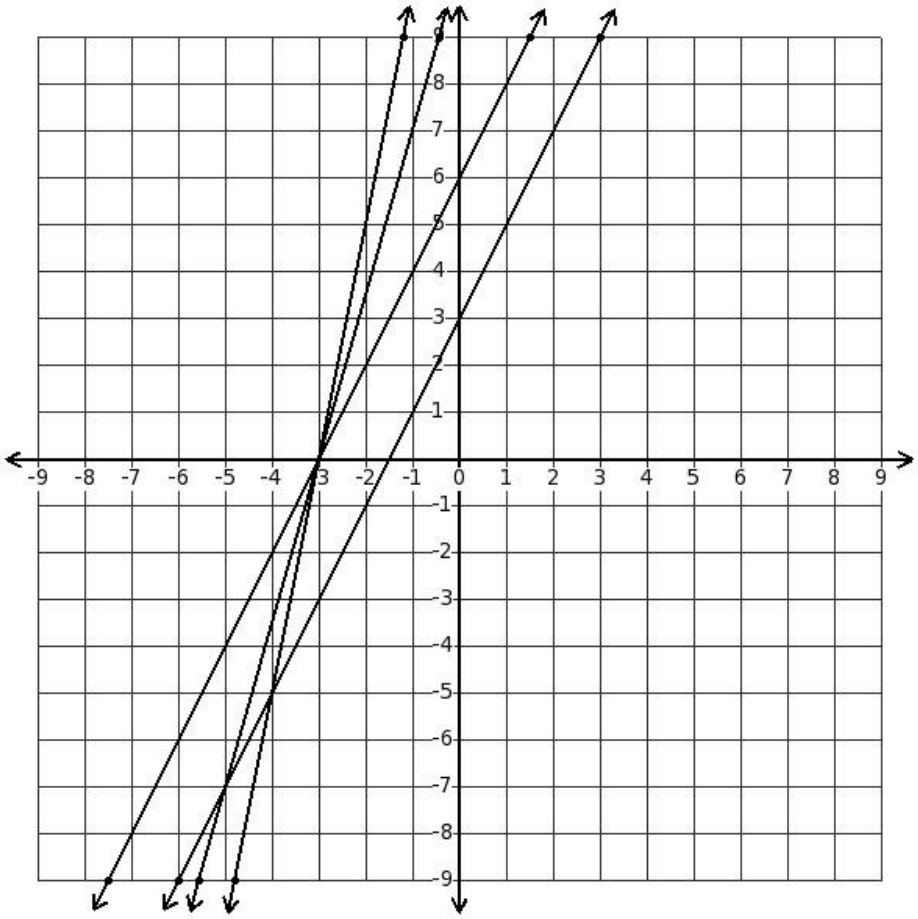
(i) $(4,0)$ (ii) $((-7),(-4))$ (iii) No solution (iv) Infinite solutions (v) $(2,(-2))$

51. Solve $\begin{matrix}(-5x-3y-12)=0\\(5x+3y-8) \ = \ 0\end{matrix}$



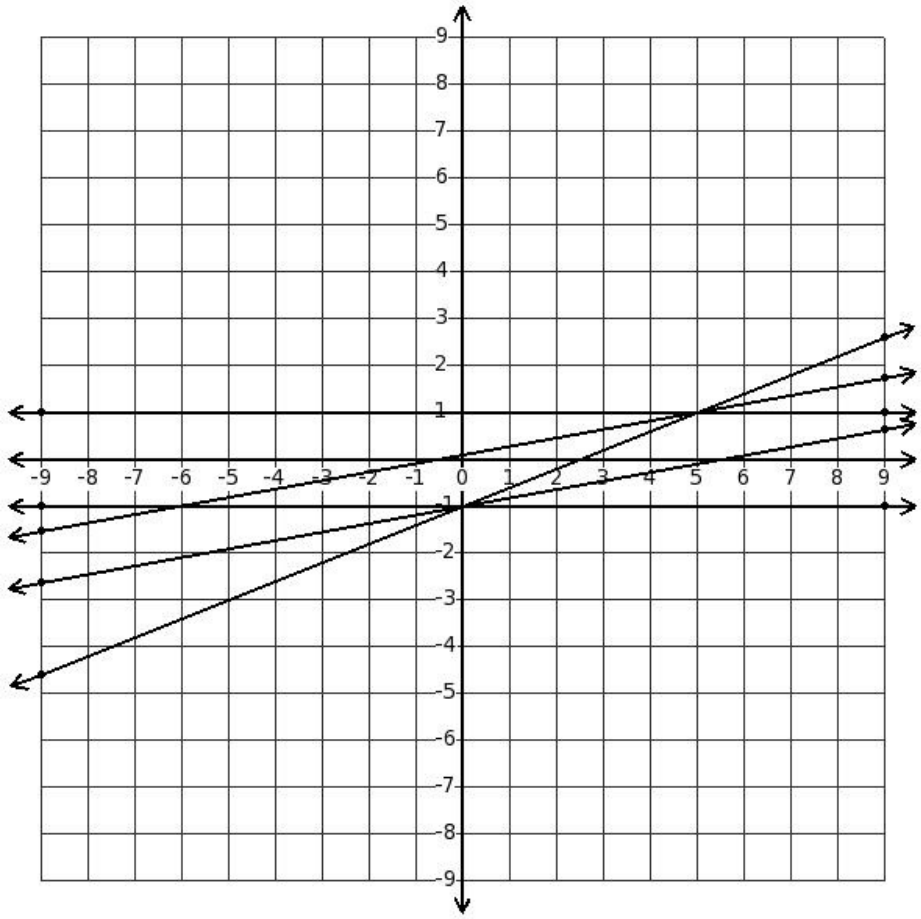
(i) $((-5),(-1))$ (ii) No solution (iii) $((-2),6)$ (iv) $((-3),1)$ (v) Infinite solutions

52. Solve $\begin{matrix}(2x-y+3) &= 0\\ (6x-3y+9) &= 0\end{matrix}$



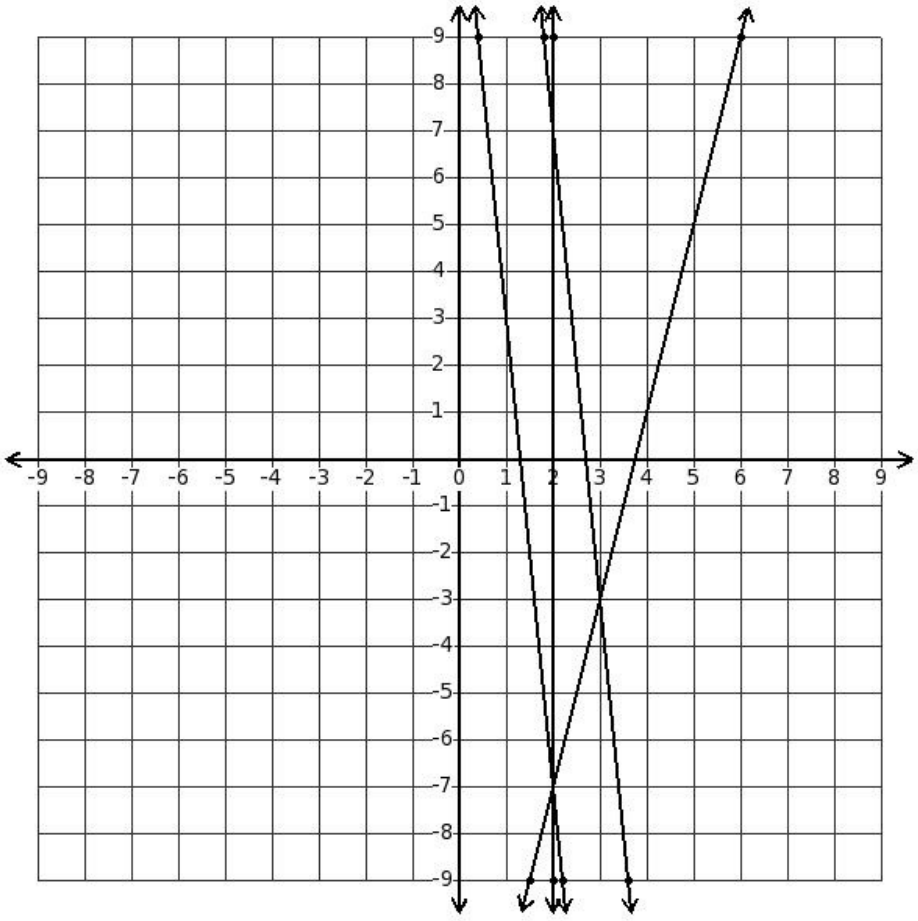
(i) Infinite solutions (ii) $((-4),(-5))$ (iii) No solution (iv) $((-3),0)$ (v) $((-5),(-7))$

53. Solve $\begin{matrix}(-2x+11y-1)=0\\(y-1)\quad\quad=\quad 0\end{matrix}$



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

54. Solve $(-10x-y+27)=0$
$(x-2) \quad = \quad 0$



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

Assignment Key

1) (ii)	2) (iii)	3) (ii)	4) (v)	5) (i)	6) (i)
7) (iii)	8) (ii)	9) (iii)	10) (i)	11) (ii)	12) (iv)
13) (iii)	14) (iii)	15) (ii)	16) (v)	17) (i)	18) (iv)
19) (iv)	20) (i)	21) (i)	22) (ii)	23) (ii)	24) (ii)
25) (v)	26) (iii)	27) (v)	28) (v)	29) (v)	30) (i)
31) (i)	32) (iv)	33) (iii)	34) (iii)	35) (iii)	36) (v)
37) (ii)	38) (ii)	39) (ii)	40) (i)	41) (iii)	42) (iii)
43) (v)	44) (iii)	45) (i)	46) (v)	47) (i)	48) (i)
49) (i)	50) (iii)	51) (ii)	52) (i)	53) (iv)	54) (ii)