

EduSahara™ Learning Center Assignment**Grade : Class X, CBSE****Chapter : Pair of Linear Equations in Two Variables****Name : Solution of Pair of Linear Equations using Graphs**

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

- (i) (0,0) (ii) (1,0) (iii) (1 , 1) (iv) (9 ,0) (v) (0, 1)
-

2. The equation of x-axis is

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

3. The equation of y-axis is

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

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

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

5. Any line parallel to x-axis is

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

6. Any line parallel to y-axis is

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

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

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

8. Which of the following are true ?

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

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

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

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

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) $y = k$

(iv) $x = 0$

(v) $x = y$

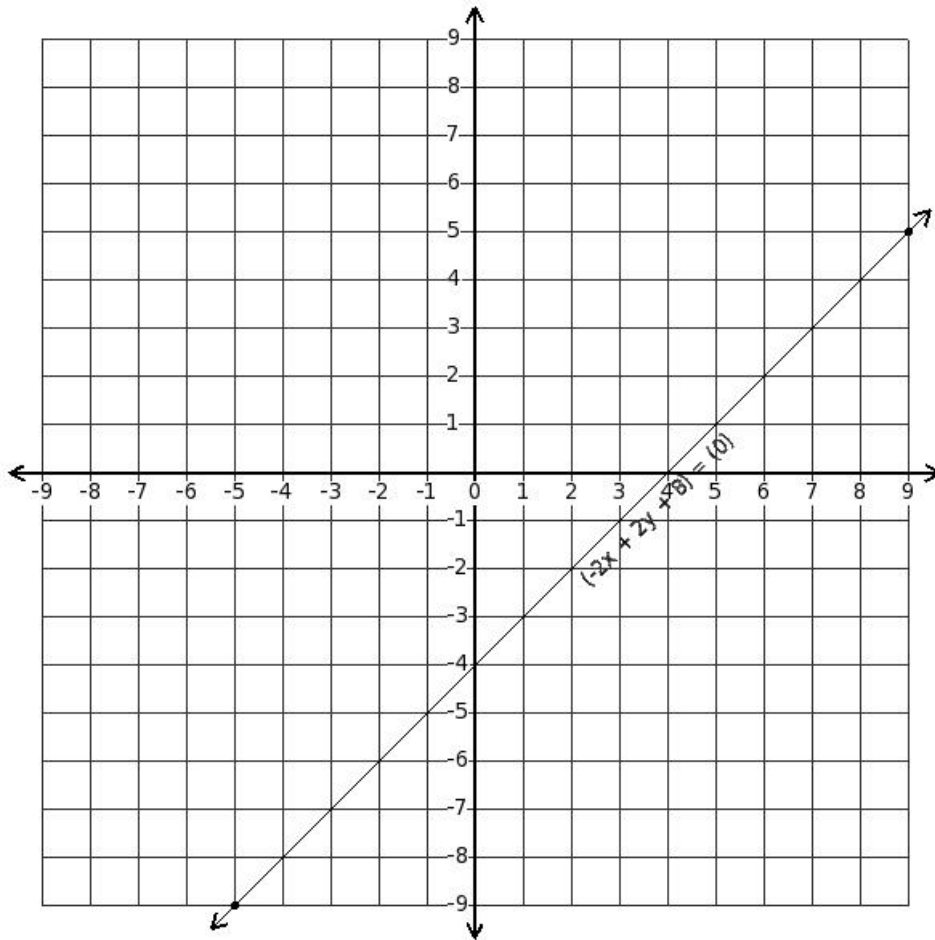
11. Write the given equation $y = (2x + 2)$ in $ax + by + c = 0$ form

(i) $(-3x + y - 2) = 0$ (ii) $(-2x + y - 2) = 0$

(iii) $(-2x - y - 2) = 0$ (iv) $(-2x + 3y - 2) = 0$

(v) $(-x + y - 2) = 0$

12. Find the equation parallel to the given equation



(i) $(-2x - 2y + 12) = 0$ (ii) $(y + 7) = 0$

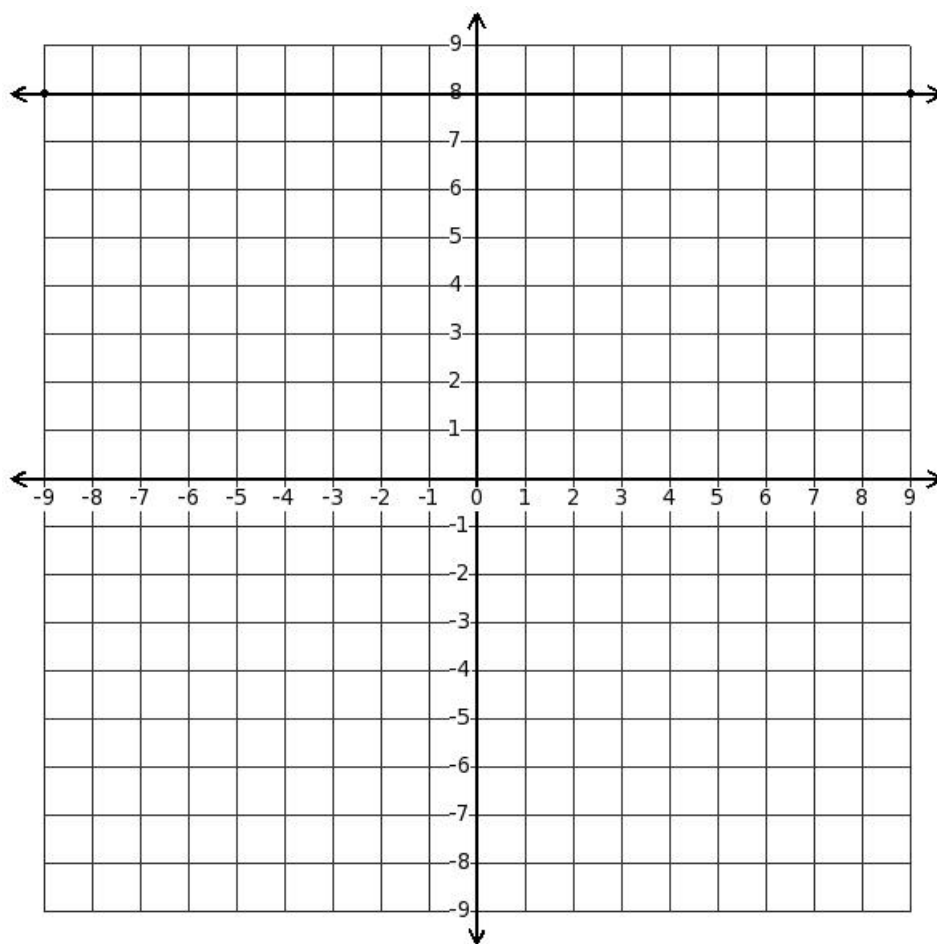
(iii) $(-4x + 2y + 10) = 0$ (iv) $(-2x + 2y + 4) = 0$

13. Find the equation parallel to the given equation $(-7x - 7y - 5) = 0$

(i) $(y - 3) = 0$ (ii) $(-x + y + 7) = 0$

(iii) $(-2x + y - 8) = 0$ (iv) $(-7x - 7y - 12) = 0$

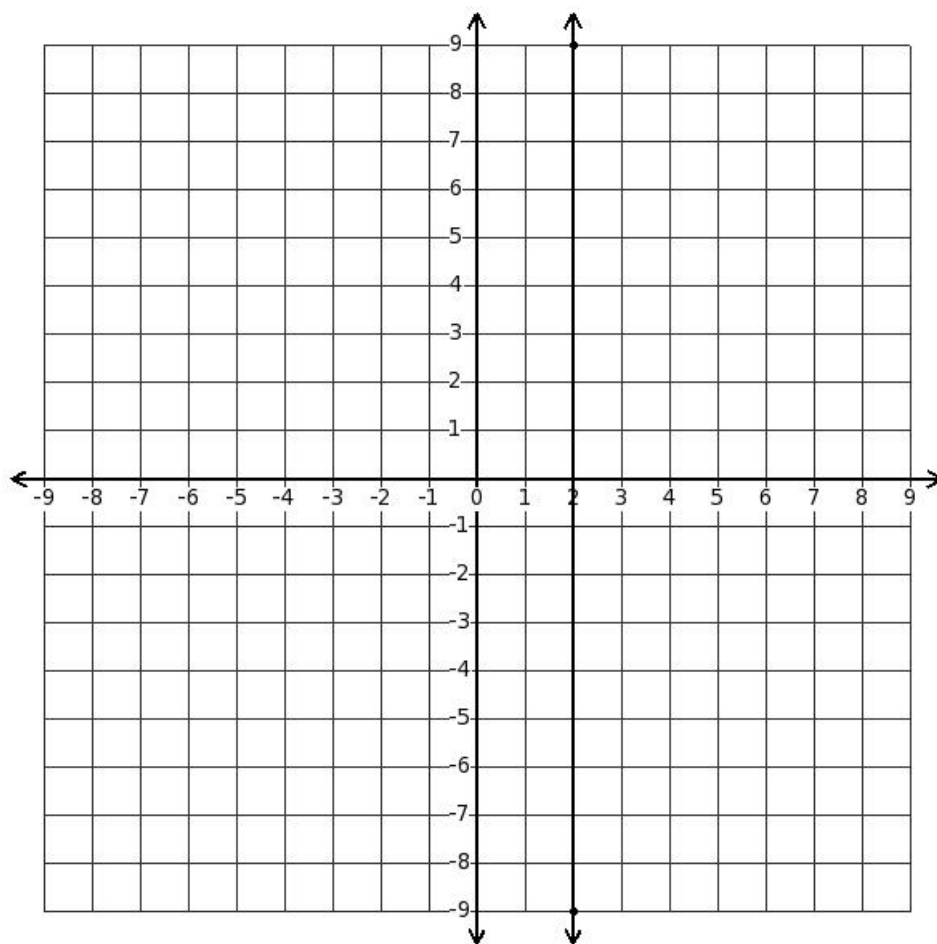
14. Find the equation of the displayed line



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

(iv) $y = 9$ (v) $y = 8$

15. Find the equation of the displayed line

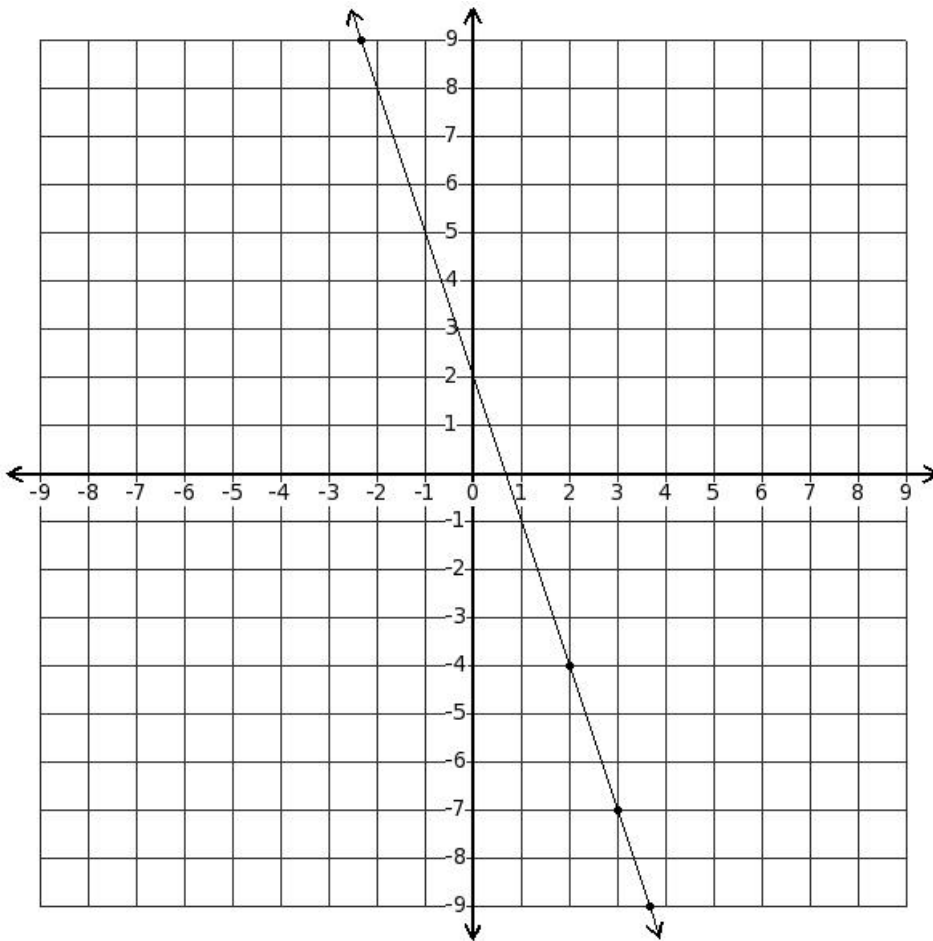


(i) $3x = 2$ (ii) $y = 2$ (iii) $x = 3$

(iv) $x = 1$ (v) $x = 2$

Find the equation of the line passing through the points

16. $(2, -4)$ and $(3, -7)$



- (i) $(-4x - y + 2) = 0$
- (ii) $(-2x - y + 2) = 0$
- (iii) $(3x + y - 3) = 0$
- (iv) $(-3x - y + 2) = 0$
- (v) $(3x + y - 5) = 0$

17. The equation of the x-axis is

- a) $y = 0$
 - b) $x = 1$
 - c) $x = 0$
 - d) $y = 1$
 - e) $x = y$
- (i) {b,a} (ii) {d,e,a} (iii) {c,a} (iv) {a}

18. Find the equation of a straight line parallel to x-axis and passing through the point $((-7), 7)$

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

$y = 6$

$y = 10$

- Find the equation of a straight line parallel to y-axis and
19. passing through the point $((-1), 8)$

(i) $x = 1$ (ii) $y = 8$ (iii) $y = 11$

(iv) $x = (-1)$ (v) $x = (-2)$

- Find the value of k such that $(2x - 2y + 14) = 0$ and
20. $(kx + 2y + 2) = 0$ are parallel to each other

(i) 0 (ii) -1 (iii) -5 (iv) -3 (v) -2

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

(i) $(8x + y + 21) = 0$, $(8x + y - 35) = 0$

(ii) $(8x + y + 21) = 0$, $(-x + 8y + 62) = 0$

(iii) $(8x + y + 21) = 0$, $(7x + y - 31) = 0$

(iv) $(8x + y + 21) = 0$, $(-9x + 8y + 110) = 0$

22. Find the set of points satisfying the equation $(-9x + 6y + 27) = 0$

(i) $((-2), (-\frac{15}{2}))$, $((-1), (-6))$, $((-2), (-\frac{13}{2}))$, $(1, (-3))$, $(2, (-\frac{3}{2}))$

(ii) $((-2), (-\frac{15}{2}))$, $((-1), (-6))$, $(1, (-\frac{11}{2}))$, $(1, (-3))$, $(2, (-\frac{3}{2}))$

(iii) $((-2), (-\frac{15}{2}))$, $((-1), (-6))$, $(0, (-\frac{9}{2}))$, $(1, (-3))$, $(4, \frac{1}{2})$

(iv) $((-2), (-\frac{15}{2}))$, $((-1), (-6))$, $(0, (-\frac{9}{2}))$, $(0, (-2))$, $(2, (-\frac{3}{2}))$

(v) $((-2), (-\frac{15}{2}))$, $((-1), (-6))$, $(0, (-\frac{9}{2}))$, $(1, (-3))$, $(2, (-\frac{3}{2}))$

23. Find the set of points satisfying the equation $y = (\frac{8}{9}x - \frac{4}{3})$

(i) $((-2), (-\frac{28}{9}))$, $((-1), (-\frac{20}{9}))$, $(0, (-\frac{4}{3}))$, $(0, \frac{5}{9})$, $(2, \frac{4}{9})$

(ii) $((-2), (-\frac{28}{9}))$, $((-1), (-\frac{20}{9}))$, $(0, (-\frac{4}{3}))$, $(1, (-\frac{4}{9}))$, $(2, \frac{4}{9})$

(iii) $((-2), (-\frac{28}{9}))$, $((-1), (-\frac{20}{9}))$, $((-2), (-\frac{10}{3}))$, $(1, (-\frac{4}{9}))$, $(2, \frac{4}{9})$

(iv) $((-2), (-\frac{28}{9}))$, $((-1), (-\frac{20}{9}))$, $(0, (-\frac{4}{3}))$, $(1, (-\frac{4}{9}))$, $(4, \frac{22}{9})$

(v) $((-2), (-\frac{28}{9}))$, $((-1), (-\frac{20}{9}))$, $(1, (-\frac{7}{3}))$, $(1, (-\frac{4}{9}))$, $(2, \frac{4}{9})$

24. Find the set of points satisfying the equation $x = (y - 7)$

- (i) $((-2), 5), ((-1), 6), (1, 6), (1, 8), (2, 9)$
- (ii) $((-2), 5), ((-1), 6), (0, 7), (0, 9), (2, 9)$
- (iii) $((-2), 5), ((-1), 6), (0, 7), (1, 8), (2, 9)$
- (iv) $((-2), 5), ((-1), 6), (1, 8), (2, 9)$
- (v) $((-2), 5), ((-1), 6), (0, 7), (1, 8), (4, 11)$

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

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

26. Find the set of points satisfying the equation $(9x + 14y - 7) = 0$

- (i) $((-2), \frac{25}{14}), ((-1), \frac{8}{7}), (0, \frac{1}{2}), (0, \frac{6}{7}), (2, (-\frac{11}{14}))$
- (ii) $((-2), \frac{25}{14}), ((-1), \frac{8}{7}), ((-2), (-\frac{3}{2})), (1, (-\frac{1}{7})), (2, (-\frac{11}{14}))$
- (iii) $((-2), \frac{25}{14}), ((-1), \frac{8}{7}), (0, \frac{1}{2}), (1, (-\frac{1}{7})), (4, \frac{17}{14})$
- (iv) $((-2), \frac{25}{14}), ((-1), \frac{8}{7}), (1, (-\frac{1}{2})), (1, (-\frac{1}{7})), (2, (-\frac{11}{14}))$
- (v) $((-2), \frac{25}{14}), ((-1), \frac{8}{7}), (0, \frac{1}{2}), (1, (-\frac{1}{7})), (2, (-\frac{11}{14}))$

27. Find the set of points satisfying the equation $y = 0$

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

28. Find the set of points satisfying the equation

$$x = (- 3)$$

- (i) $((-3), (-2)), ((-3), (-1)), ((-3), 0), ((-3), 1), ((-1), 4)$
- (ii) $((-3), (-2)), ((-3), (-1)), ((-5), (-2)), ((-3), 1), ((-3), 2)$
- (iii) $((-3), (-2)), ((-3), (-1)), ((-3), 0), ((-4), 2), ((-3), 2)$
- (iv) $((-3), (-2)), ((-3), (-1)), ((-3), 0), ((-3), 1), ((-3), 2)$
- (v) $((-3), (-2)), ((-3), (-1)), ((-2), (-1)), ((-3), 1), ((-3), 2)$
-

Which of the following equations satisfy the given points

29. $((-2), \frac{2}{9}), ((-1), (-\frac{4}{3})), (0, (-\frac{26}{9})), (1, (-\frac{40}{9})), (2, (-6))$?

- (i) $y = 2$
- (ii) $x = (\frac{14}{9}y - \frac{73}{9})$
- (iii) $(-14x - 9y - 26) = 0$
- (iv) $x = (-5)$
- (v) $y = (-\frac{14}{9}x - \frac{52}{9})$
-

Which of the following equations satisfy the given points

30. $((-2), 3), ((-1), 1), (0, (-1)), (1, (-3)), (2, (-5))$?

- (i) $(-10x - 5y - 10) = 0$
- (ii) $(8x + 35y - 5) = 0$
- (iii) $x = (2y + 2)$
- (iv) $y = (-2x - 1)$
- (v) $x = 0$
-

Which of the following equations satisfy the given points

31. $((-2), 3), ((-1), \frac{15}{8}), (0, \frac{3}{4}), (1, (-\frac{3}{8})), (2, (-\frac{3}{2}))$?

- (i) $y = (-\frac{3}{5}x - \frac{61}{5})$
- (ii) $y = (-8)$
- (iii) $x = (\frac{3}{5}y - \frac{11}{5})$
- (iv) $(9x + 8y - 6) = 0$
- (v) $x = (-7)$

Which of the following equations satisfy the given points

32. $((-2), 7), ((-1), 7), (0, 7), (1, 7), (2, 7)$?

(i) $y = (-\frac{3}{4}x + \frac{7}{4})$

(ii) $x = (\frac{3}{4}y - \frac{49}{4})$

(iii) $x = (-7)$

(iv) $y = 7$

(v) $(-6x - 8y + 20) = 0$

Which of the following equations satisfy the given points

33. $((-4), (-2)), ((-4), (-1)), ((-4), 0), ((-4), 1), ((-4), 2)$?

(i) $(3x + 2y - 1) = 0$

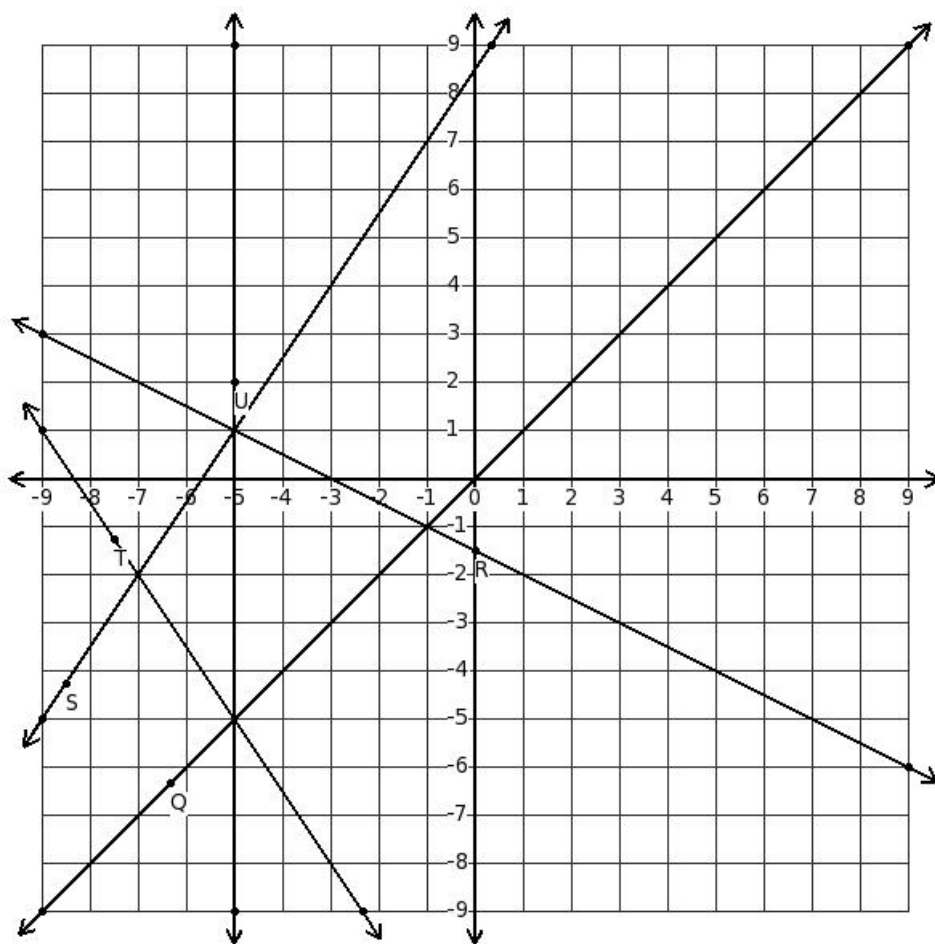
(ii) $y = (-\frac{17}{8}x - \frac{9}{2})$

(iii) $x = (-4)$

(iv) $(-17x - 8y + 30) = 0$

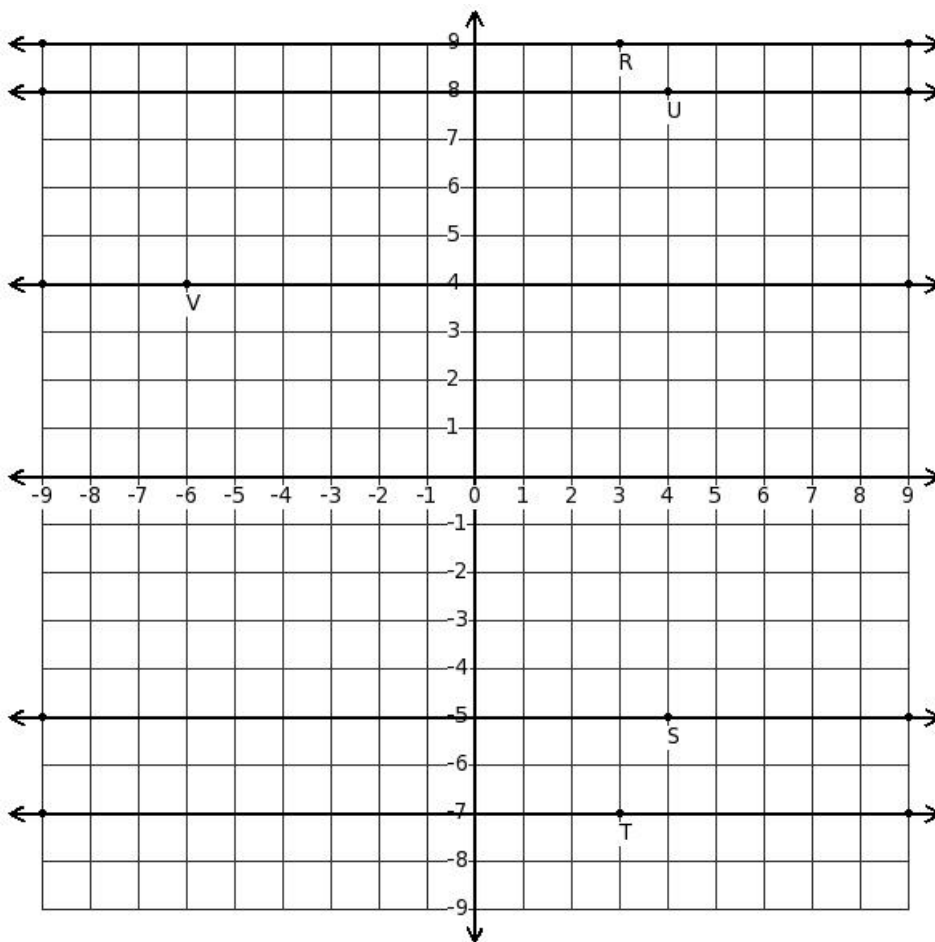
(v) $y = 4$

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



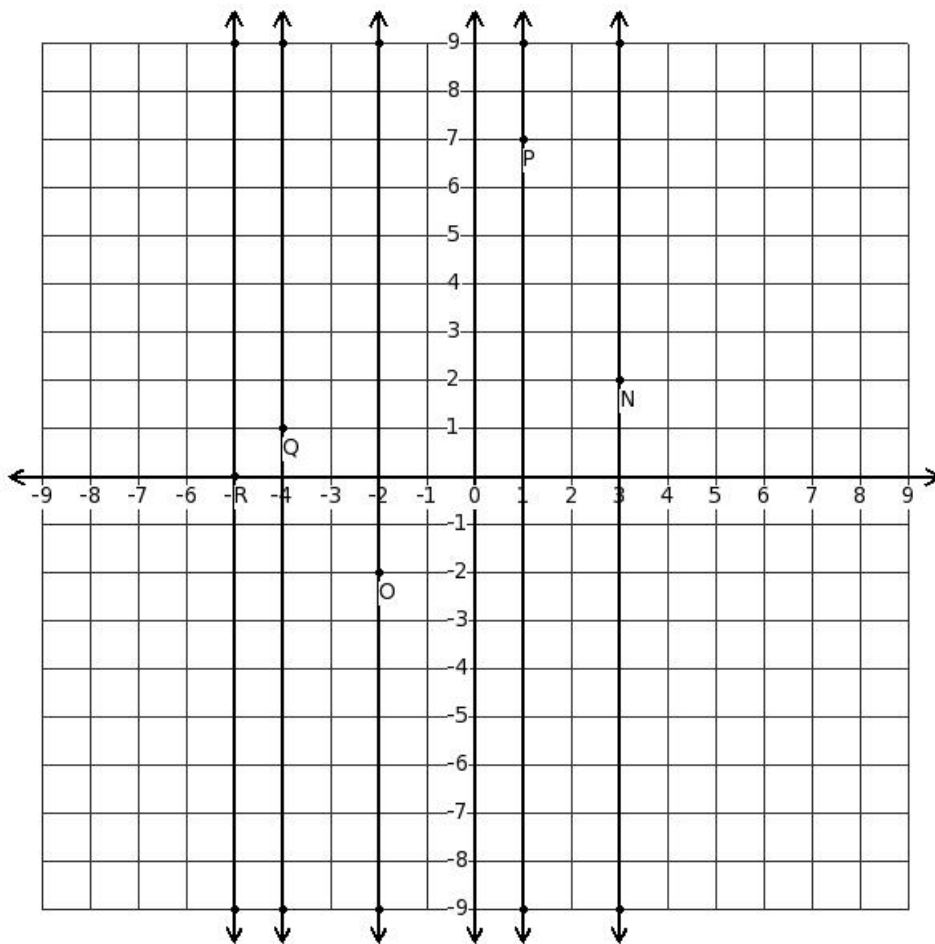
- (i) line with point R
- (ii) line with point U
- (iii) line with point S
- (iv) line with point Q
- (v) line with point T

35. Which of the displayed lines represent the equation $y = -9$



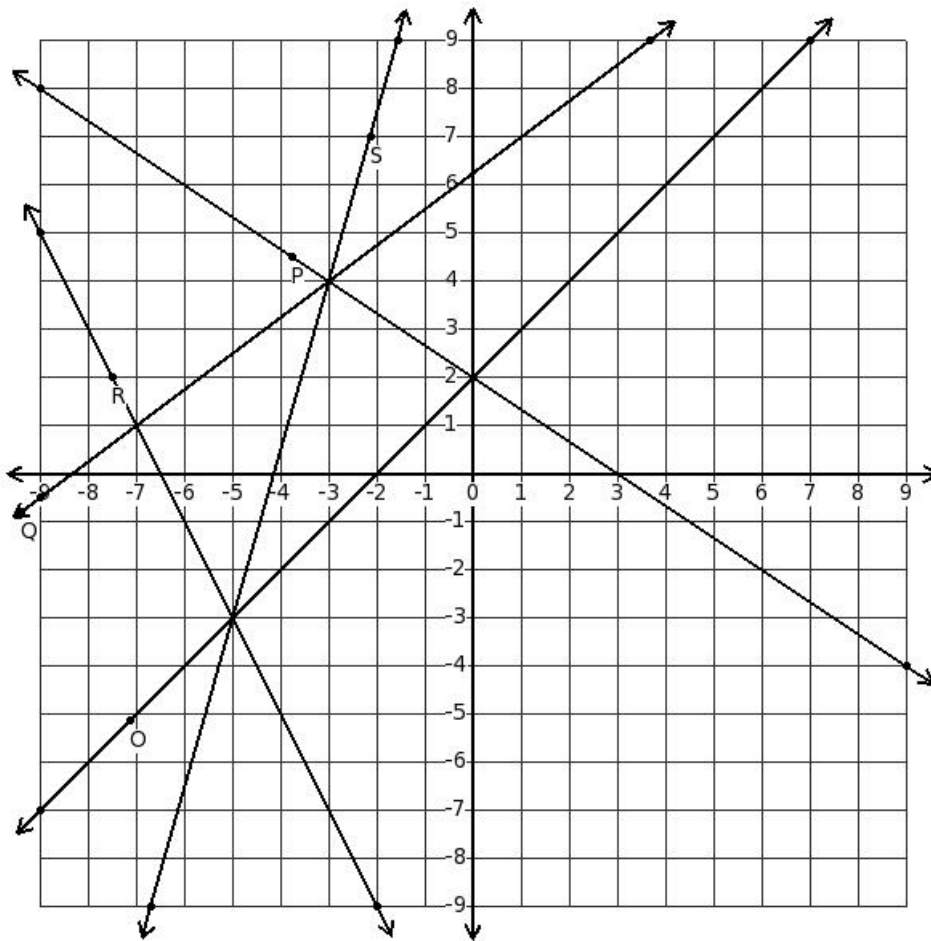
- (i) line with point S
- (ii) line with point U
- (iii) line with point R
- (iv) line with point V
- (v) line with point T

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



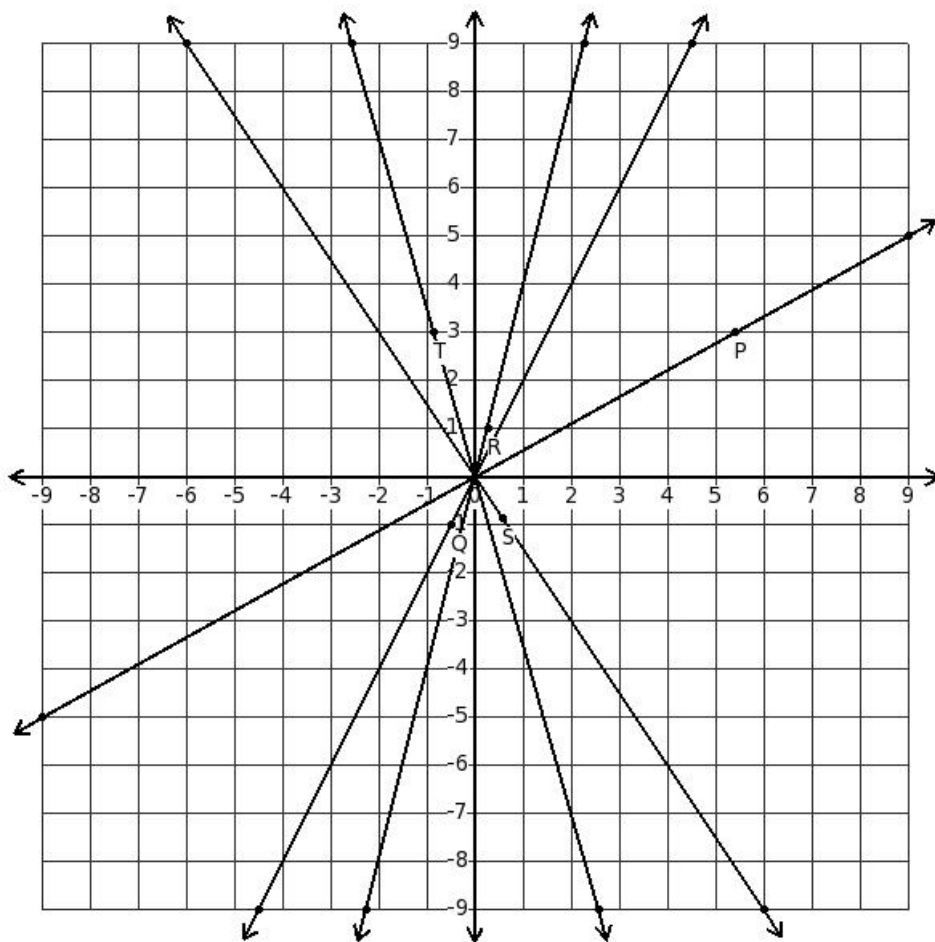
- (i) line with point O
- (ii) line with point P
- (iii) line with point N
- (iv) line with point Q
- (v) line with point R

37. Which of the displayed lines represent the equation $y = (x + 2)$



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

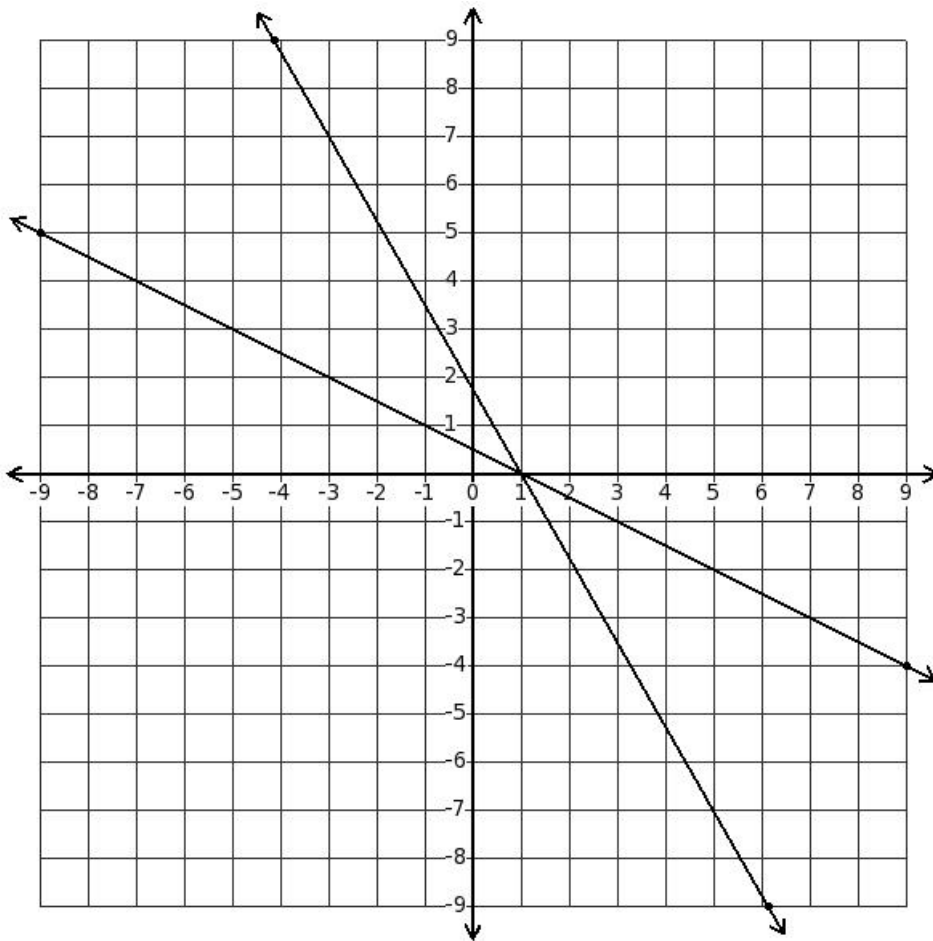
38. Which of the displayed lines represent the equation $y = \frac{5}{9}x$



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

39. Solve

$$\begin{aligned} (2x + 4y - 2) &= 0 \\ (7x + 4y - 7) &= 0 \end{aligned}$$

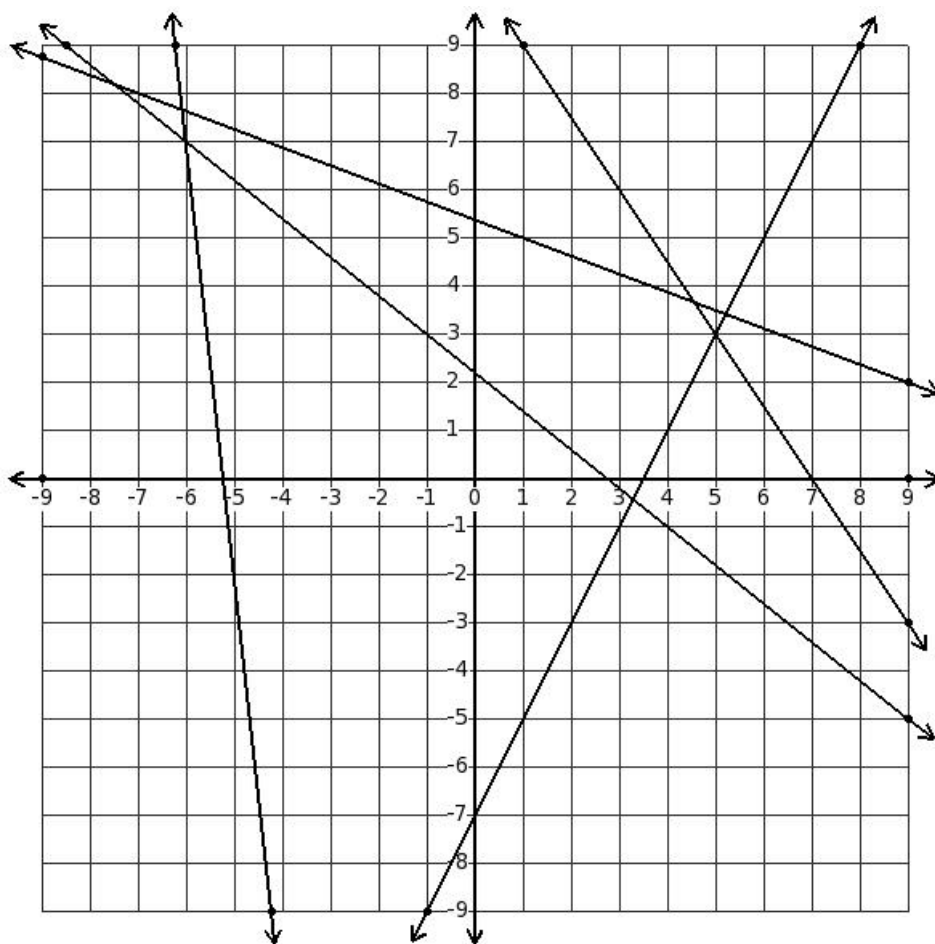


(i) $(0, 1)$ (ii) $(1, 0)$ (iii) $((-1), (-2))$

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

40. Solve

$$\begin{aligned} (4x + 5y - 11) &= 0 \\ (-9x - y - 47) &= 0 \end{aligned}$$

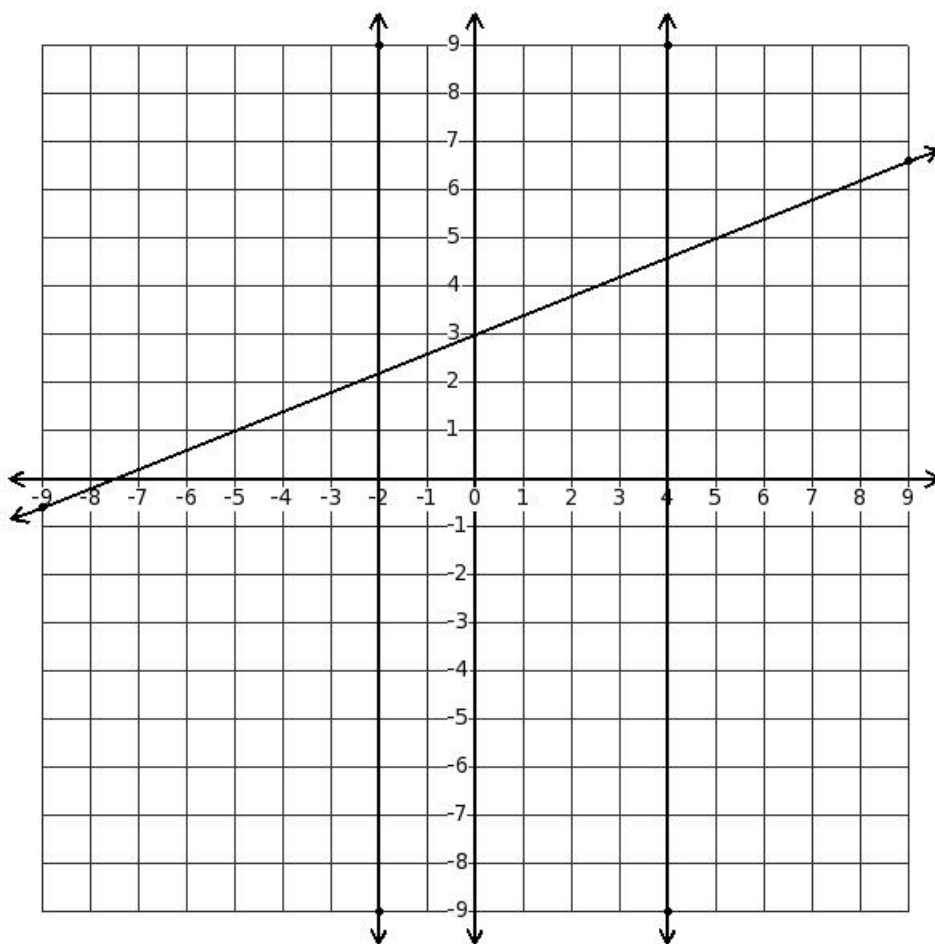


(i) $((-8), 5)$ (ii) $(1, 5)$ (iii) $((-4), 9)$

(iv) $((-6), 7)$ (v) $(5, 3)$

41. Solve

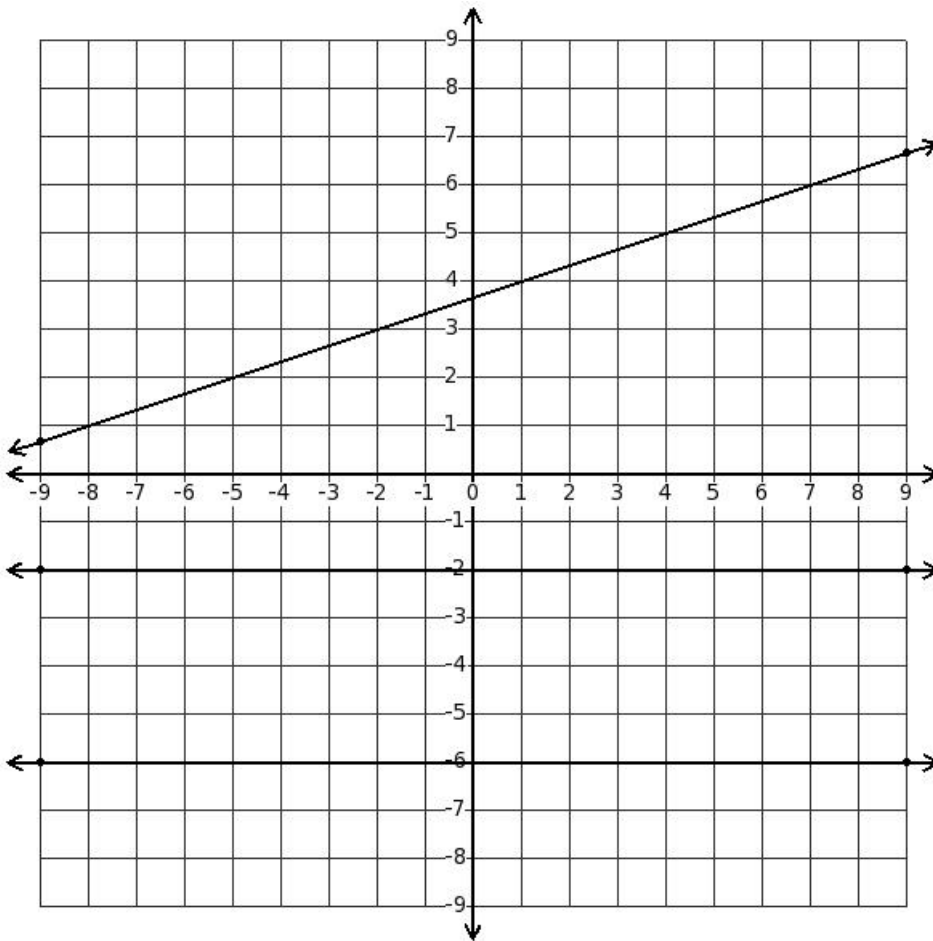
$$\begin{aligned} (x - 4) &= 0 \\ (x + 2) &= 0 \end{aligned}$$



(i) $(5, 5)$ (ii) $((-5), 1)$ (iii) Infinite solutions

(iv) No solution (v) $((-7), (-1))$

42. Solve $(y + 6) = 0$
 $(y + 2) = 0$

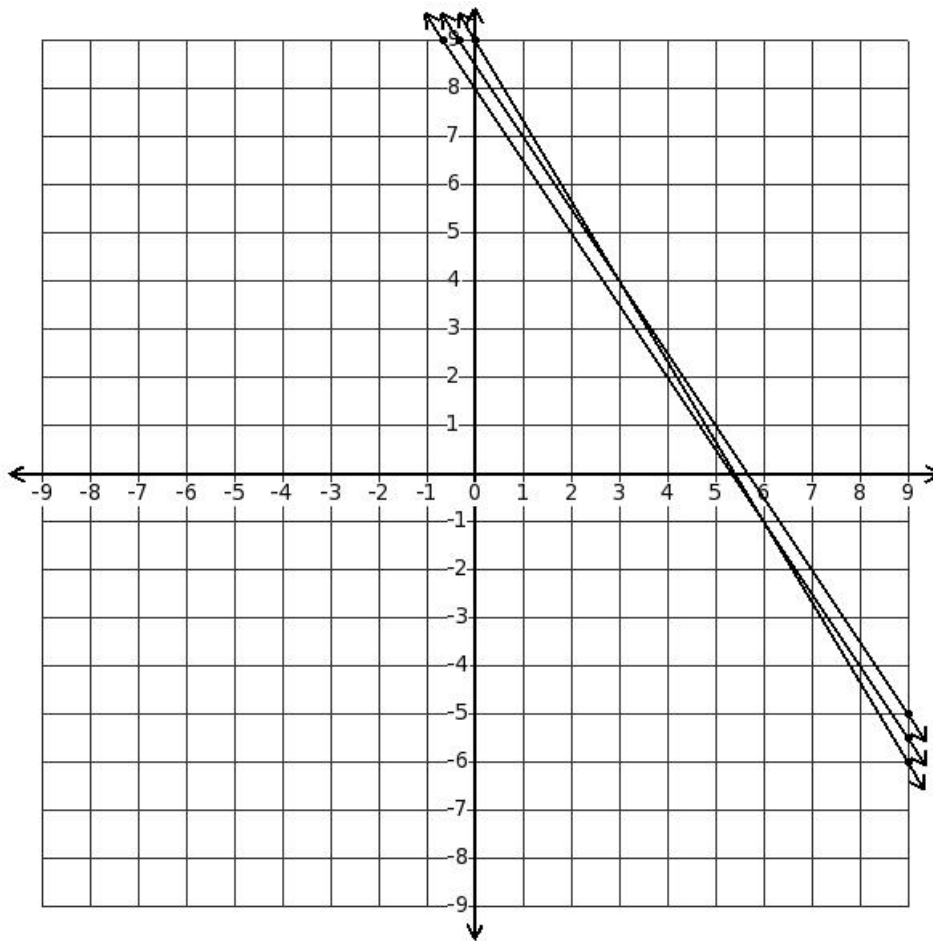


(i) $(1, 4)$ (ii) $(7, 6)$ (iii) Infinite solutions

(iv) No solution (v) $(5, 4)$

43. Solve

$$\begin{aligned} (-6x - 4y + 34) &= 0 \\ (3x + 2y - 16) &= 0 \end{aligned}$$

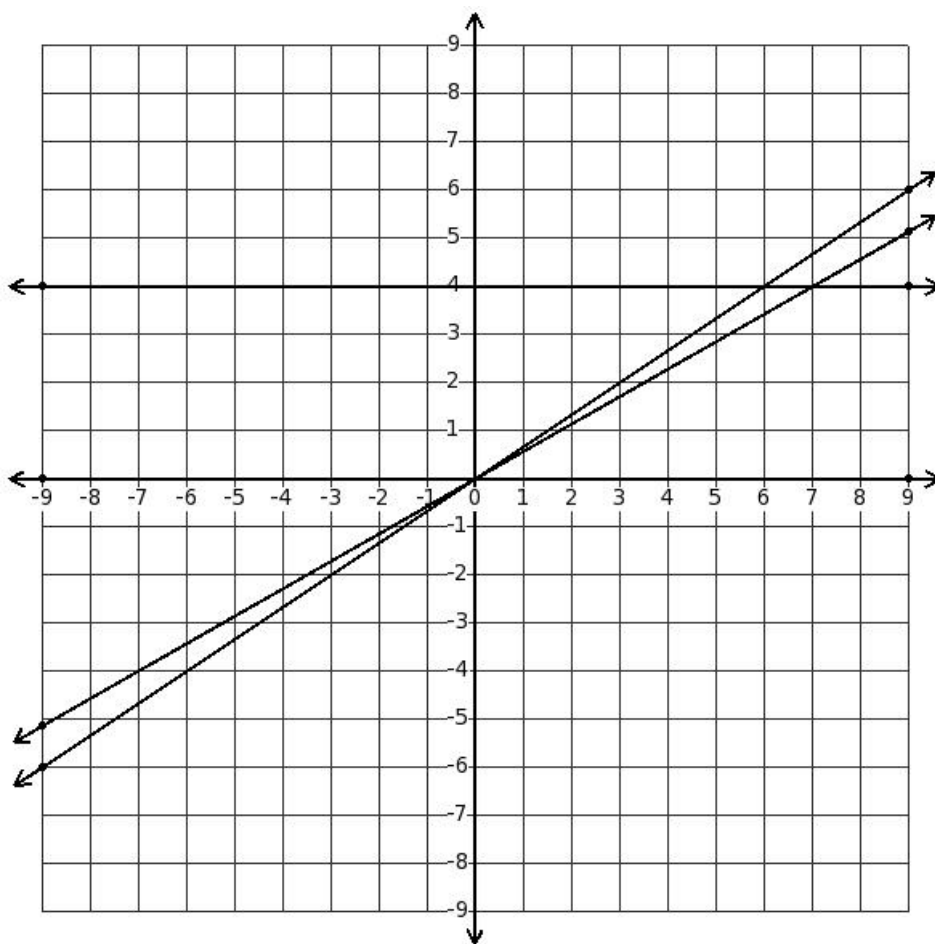


(i) $(3, 4)$ (ii) $(1, 2)$ (iii) $(6, -1)$

(iv) Infinite solutions (v) No solution

44. Solve

$$\begin{aligned} (y - 4) &= 0 \\ (3y - 12) &= 0 \end{aligned}$$

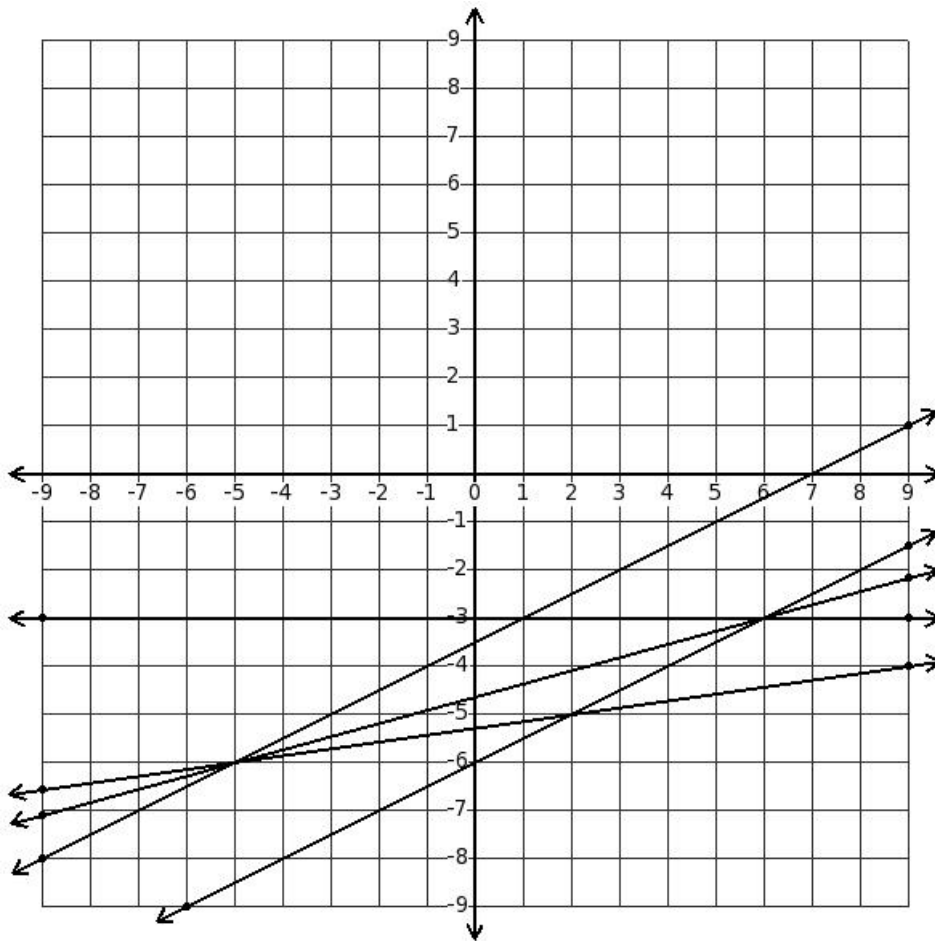


(i) No solution (ii) (0,0) (iii) Infinite solutions

(iv) (6 , 4) (v) (7 , 4)

45. Solve

$$\begin{aligned} (-2x + 4y + 24) &= 0 \\ (y + 3) &= 0 \end{aligned}$$

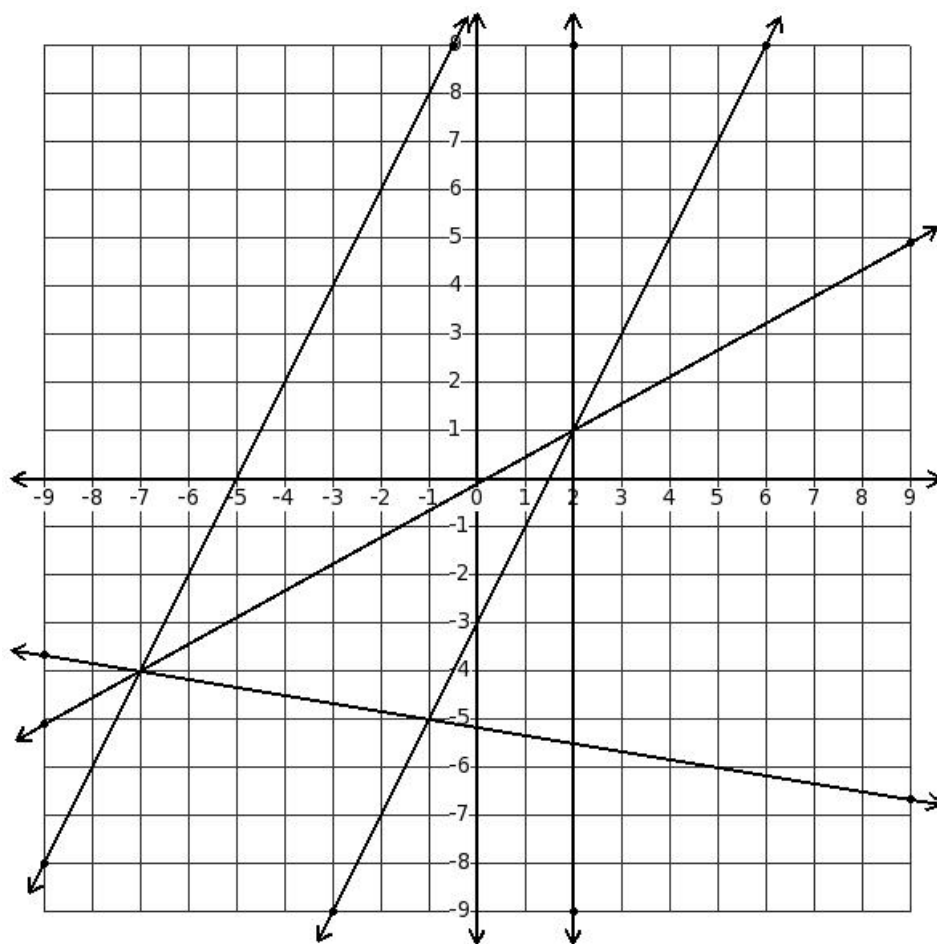


(i) $(-2, -5)$ (ii) $(6, -3)$ (iii) $(-5, -6)$

(iv) $(0, -3)$ (v) $(6, 0)$

46. Solve

$$\begin{aligned} (-6x + 3y + 9) &= 0 \\ (x - 2) &= 0 \end{aligned}$$

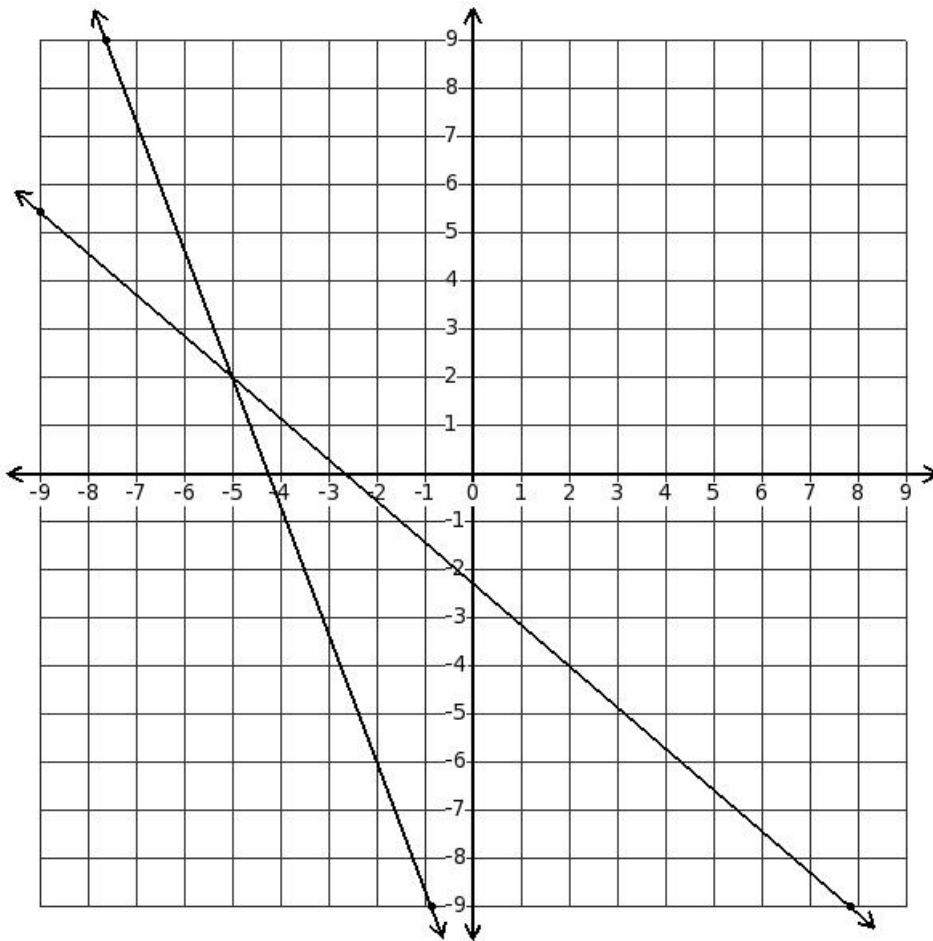


(i) $((-1), (-5))$ (ii) $(2, 0)$ (iii) $((-7), (-4))$

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

47. Solve

$$\begin{aligned} (8x + 3y + 34) &= 0 \\ (-6x - 7y - 16) &= 0 \end{aligned}$$

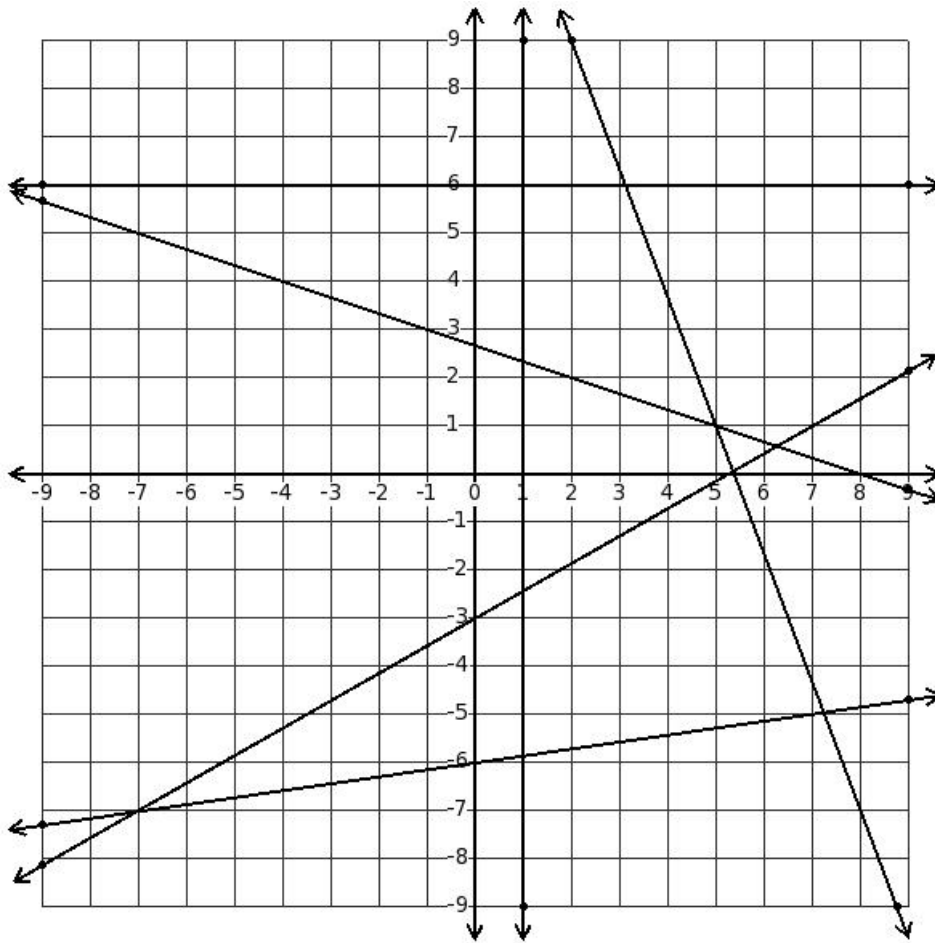


(i) $((-4), 1)$ (ii) $((-7), 0)$ (iii) $((-3), 4)$

(iv) $((-5), 2)$ (v) $((-6), 3)$

48. Solve

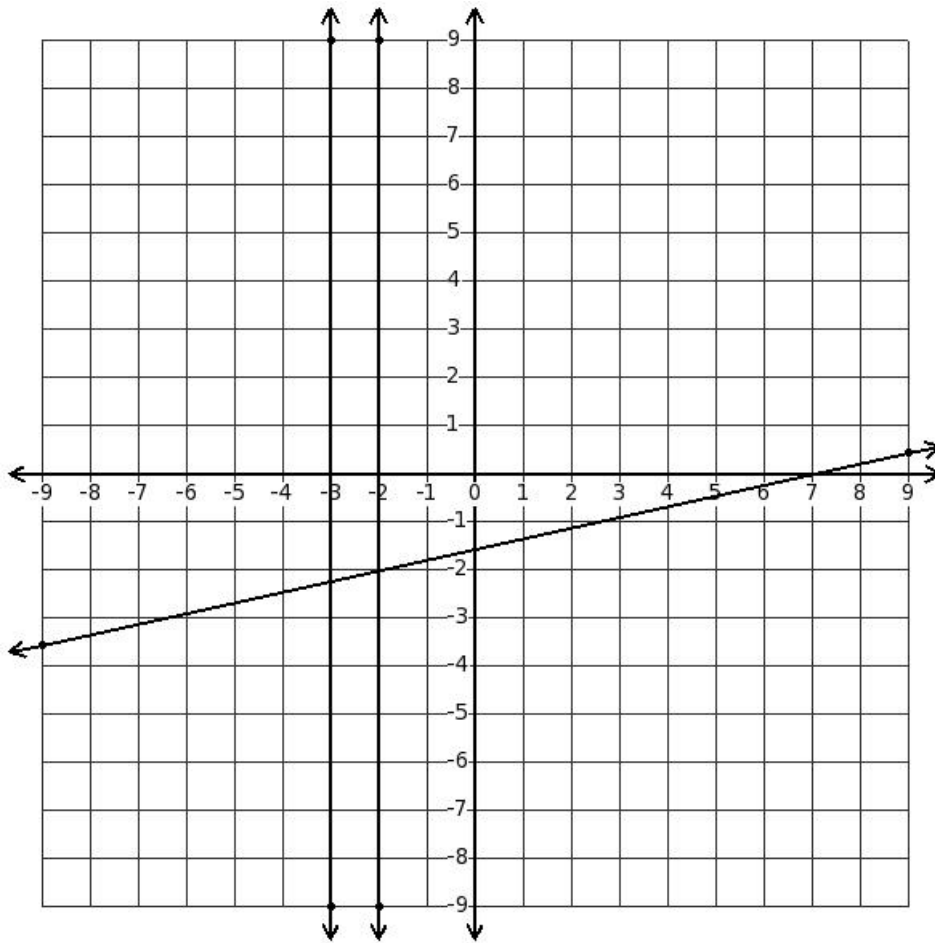
$$\begin{aligned} (-8x + 14y + 42) &= 0 \\ (2x - 14y - 84) &= 0 \end{aligned}$$



(i) $((-9), (-9))$ (ii) $(5, 1)$ (iii) $(1, 6)$

(iv) $((-5), (-5))$ (v) $((-7), (-7))$

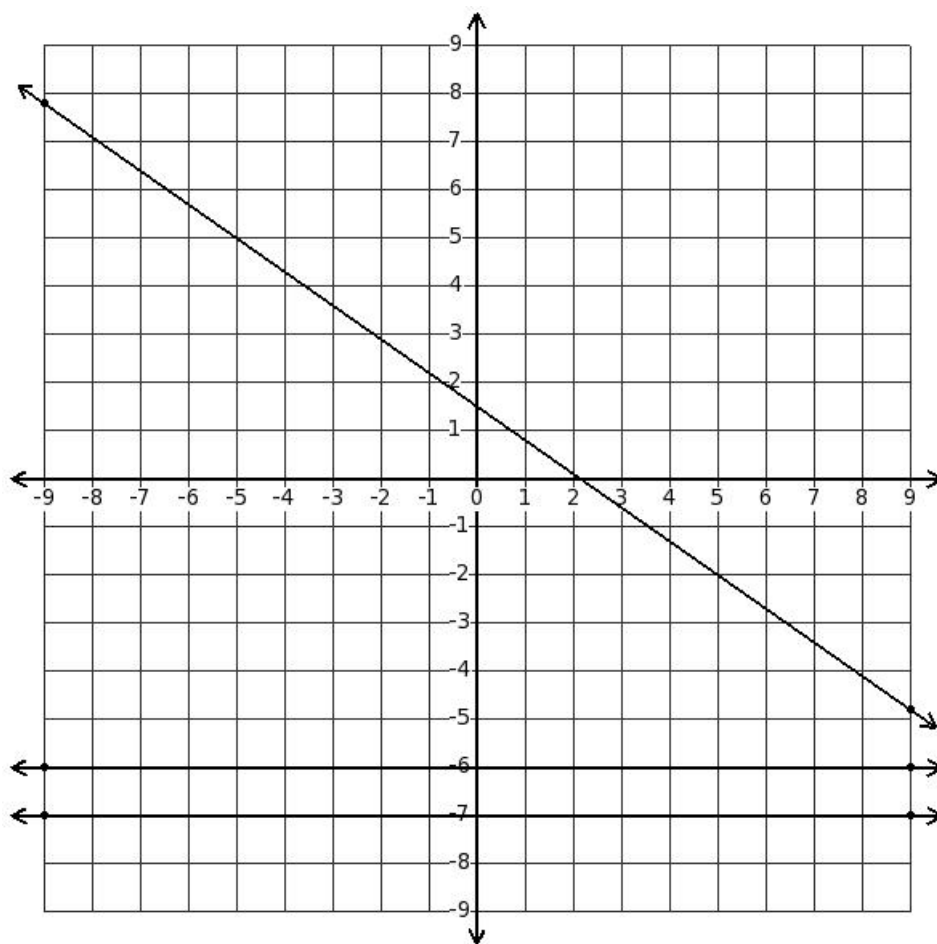
49. Solve $(x + 3) = 0$
 $(x + 2) = 0$



(i) Infinite solutions (ii) $(-7, 0)$ (iii) $(5, -2)$

(iv) $(-2, -2)$ (v) No solution

50. Solve $(y + 6) = 0$
 $(y + 7) = 0$

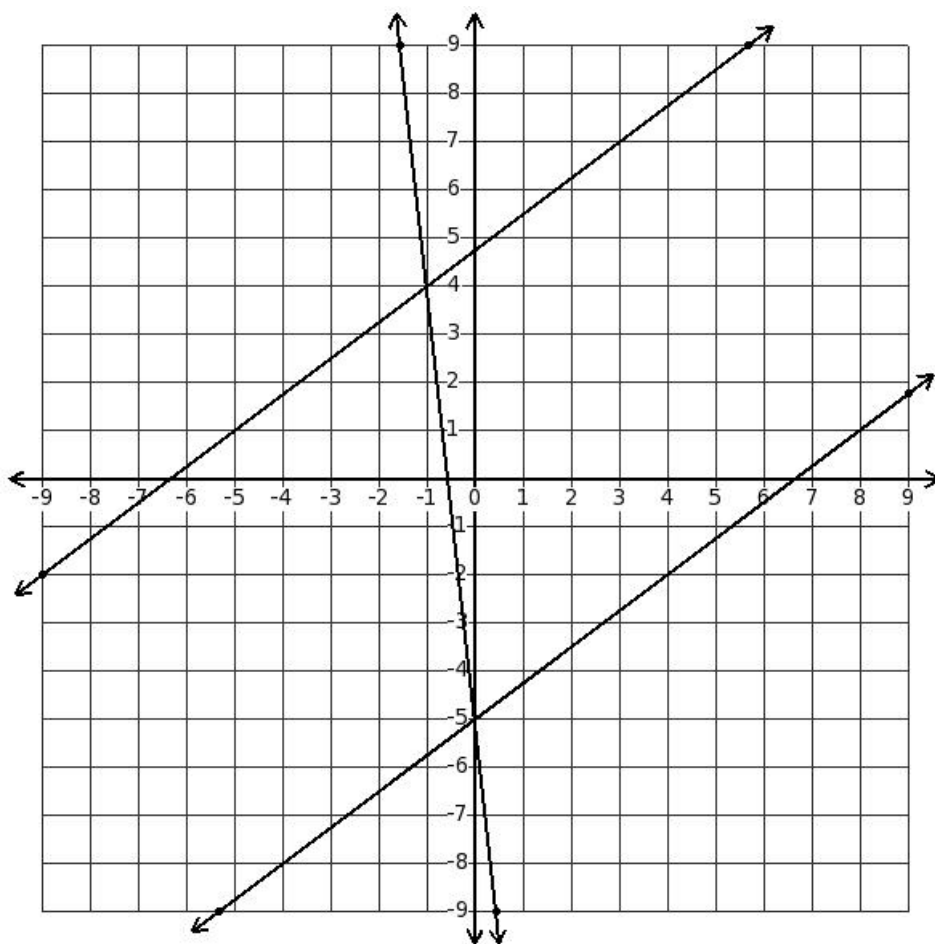


(i) Infinite solutions (ii) $((-5), 5)$ (iii) $((-7), 3)$

(iv) No solution (v) $(5, (-2))$

51. Solve

$$\begin{aligned} (3x - 4y + 19) &= 0 \\ (-3x + 4y + 20) &= 0 \end{aligned}$$

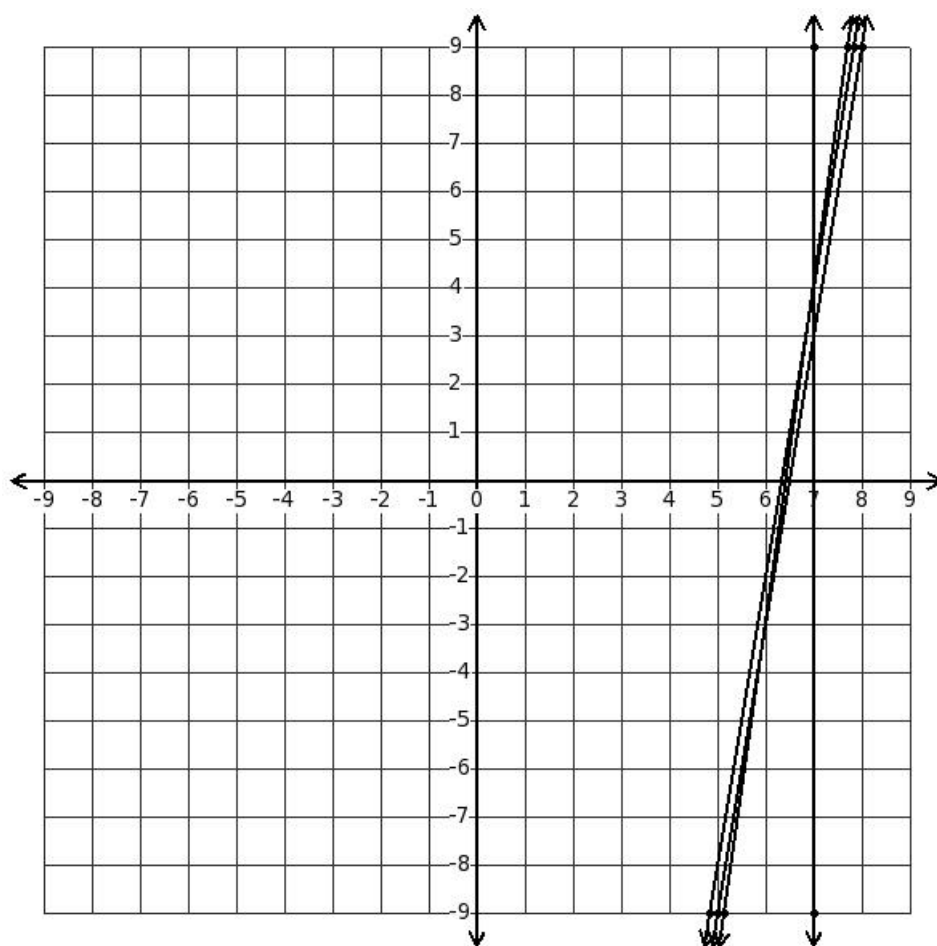


(i) Infinite solutions (ii) $((-1), 4)$ (iii) $(0, (-5))$

(iv) No solution (v) $((-3), 2)$

52. Solve

$$\begin{aligned} (-6x + y + 39) &= 0 \\ (-12x + 2y + 78) &= 0 \end{aligned}$$

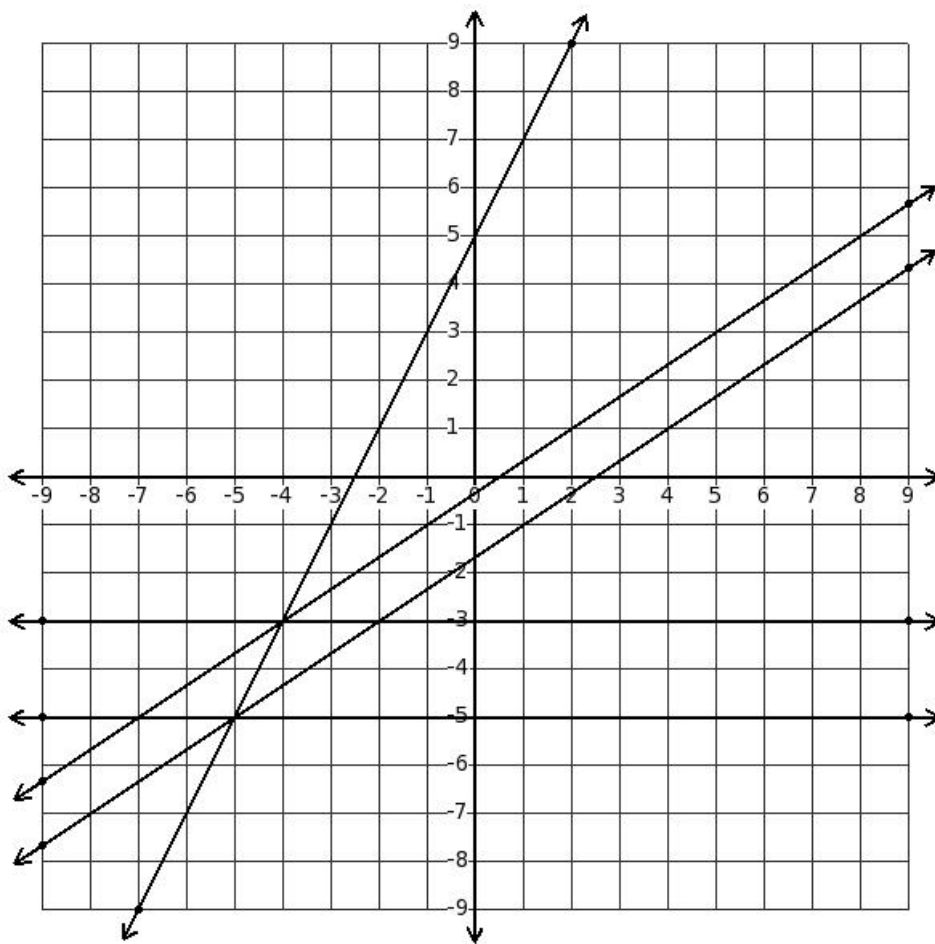


(i) $(6, -3)$ (ii) No solution (iii) Infinite solutions

(iv) $(7, 3)$ (v) $(7, 4)$

53. Solve

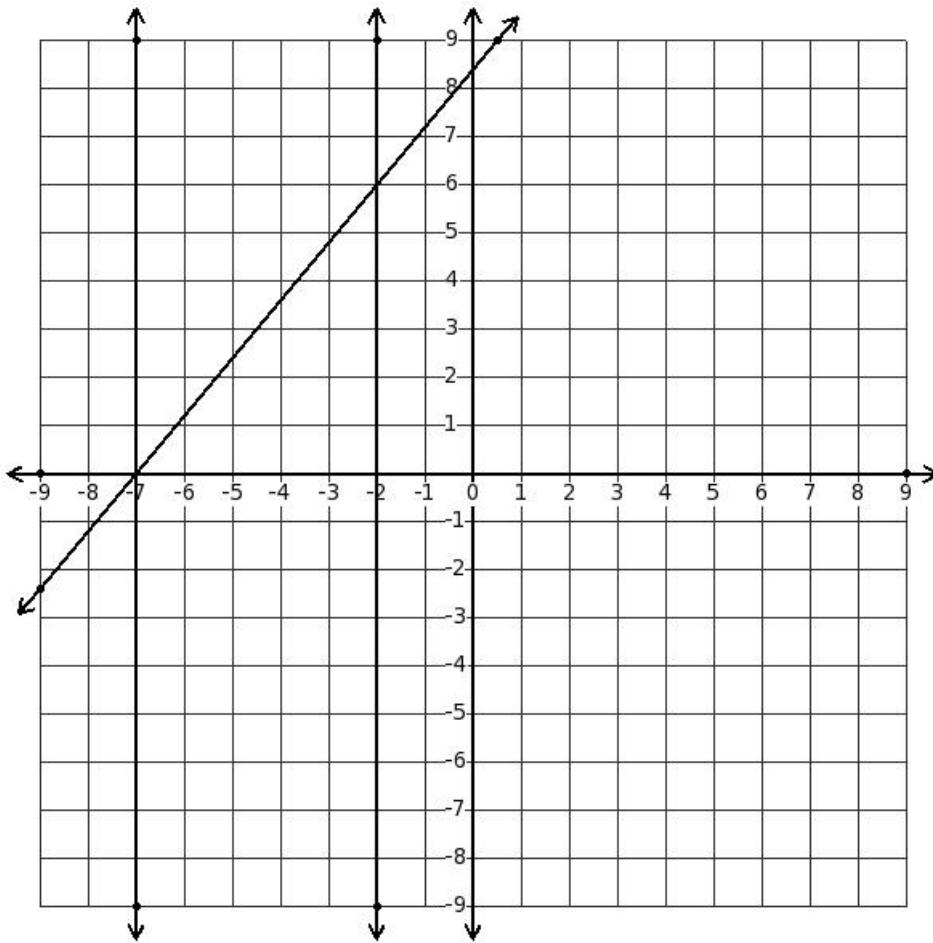
$$\begin{aligned} (-2x + 3y + 1) &= 0 \\ (y + 3) &= 0 \end{aligned}$$



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

54. Solve

$$\begin{aligned} (6x + 12) &= 0 \\ (x + 2) &= 0 \end{aligned}$$



(i) $((-2), 0)$ (ii) $((-7), 0)$ (iii) $(0, 0)$

(iv) $((-2), 6)$

Assignment Key

- 1) (i)
- 2) (i)
- 3) (iii)
- 4) (i)
- 5) (i)
- 6) (i)
- 7) (i)
- 8) (ii)
- 9) (iii)
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- 46) (v)
- 47) (iv)
- 48) (v)
- 49) (v)
- 50) (iv)
- 51) (iv)
- 52) (iii)
- 53) (v)
- 54) (i)