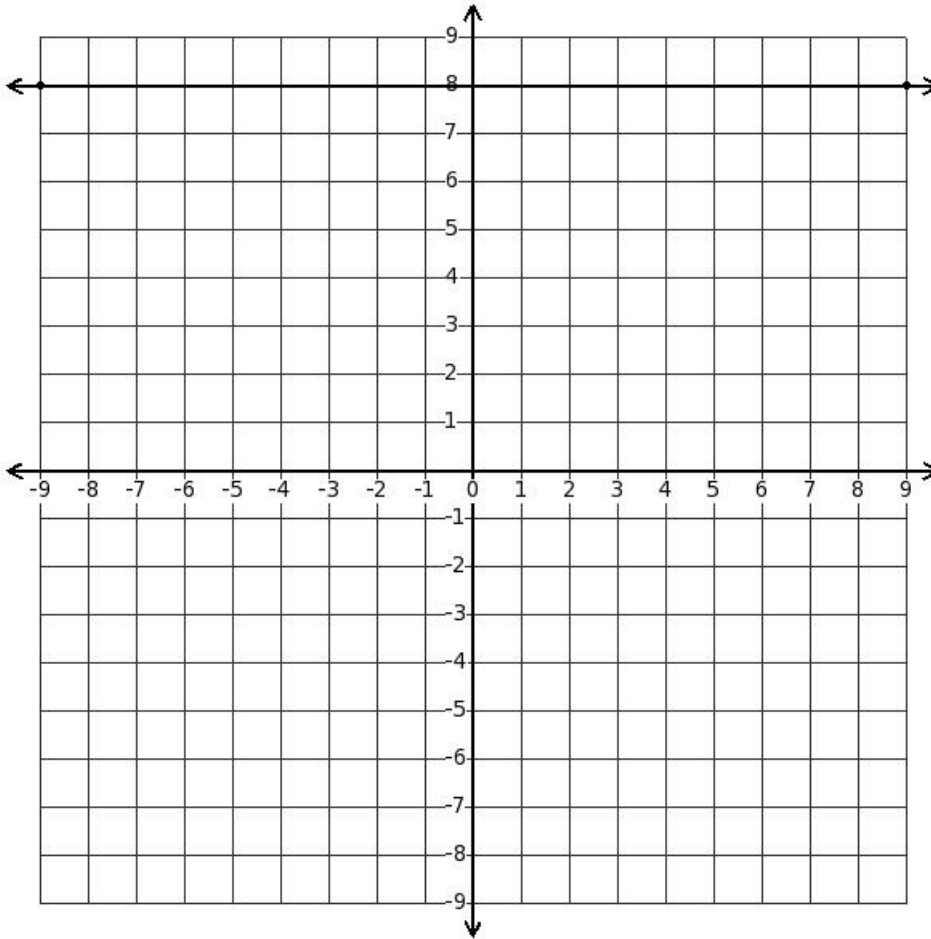


**EduSahara™ Learning Center Assignment****Grade : Class IX, ICSE****Chapter : Co-ordinate Geometry****Name : Graphs of Linear Equations**

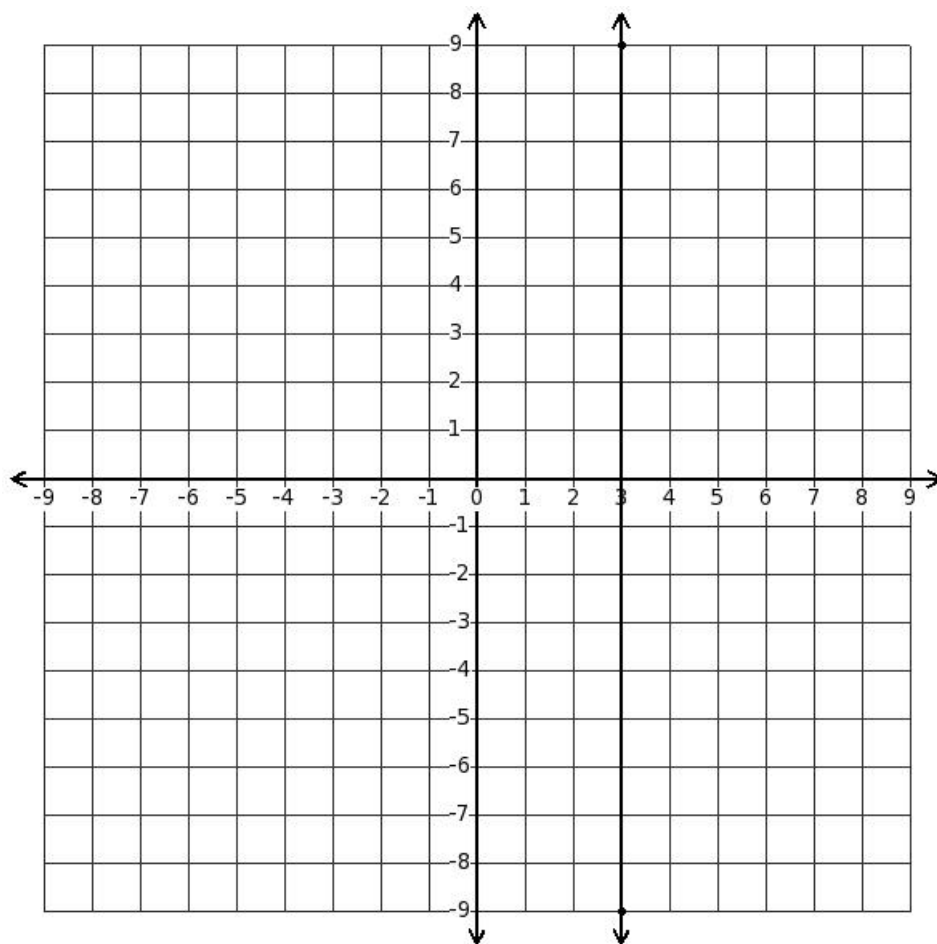
1. Find the equation of the displayed line



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

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

2. Find the equation of the displayed line



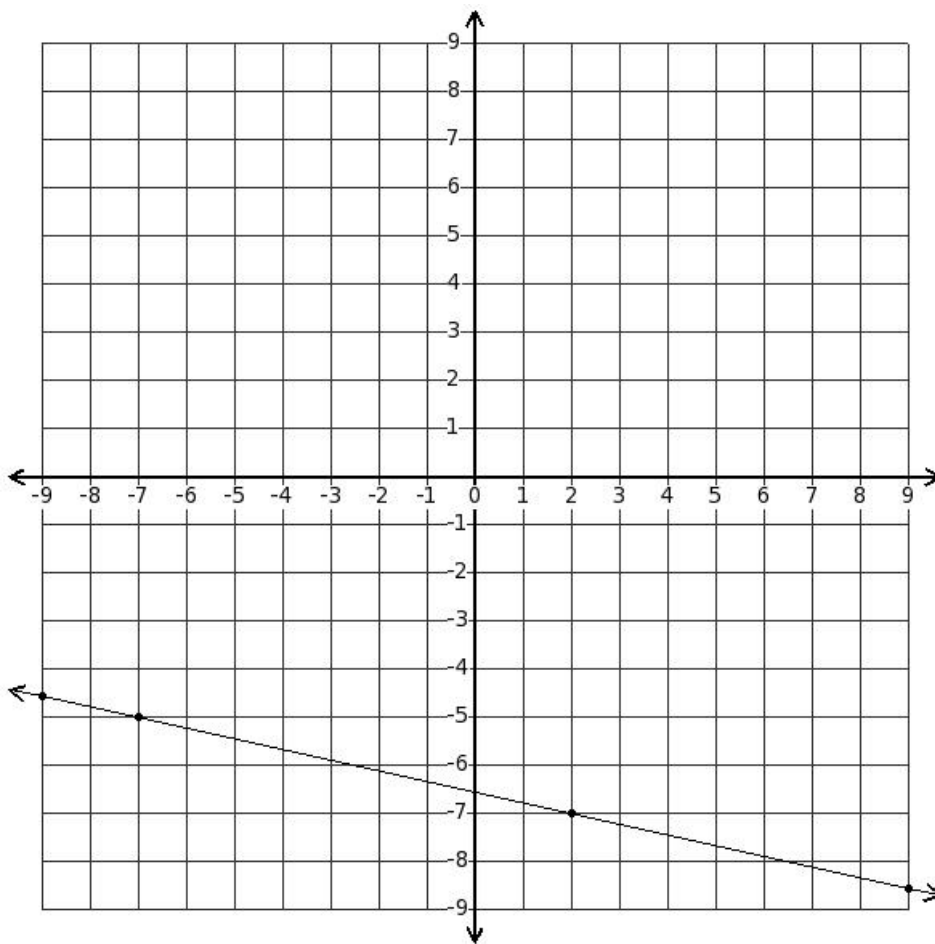
(i)  $y = 3$  (ii)  $x = 3$  (iii)  $x = 4$

(iv)  $x = 2$  (v)  $3x = 3$

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Find the equation of the line passing through the points

3.  $((-7), (-5))$  and  $(2, (-7))$



- (i)  $(-2x - 9y - 59) = 0$
- (ii)  $(2x + 9y + 57) = 0$
- (iii)  $(2x + 9y + 50) = 0$
- (iv)  $(-3x - 9y - 59) = 0$
- (v)  $(-x - 9y - 59) = 0$

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

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

5. The equation of the line with slope  $m \neq 0$  and y-intercept  $c \neq 0$  is

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

6. The equation of the line passing through the points

$(7, 7)$  and  $(0, -8)$  is

(i)  $(-13x + 91) = 0$

(ii)  $(-15x + 7y + 56) = 0$

(iii)  $(7x + 6y - 13) = 0$

(iv)  $(2x - 7y - 56) = 0$

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7. The equation of x-axis is

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

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8. The equation of y-axis is

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

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9. Any line parallel to x-axis is

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

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

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

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11. 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  $y = mx + 5$
- (i)  $\{c,d,a\}$  (ii)  $\{c,b,a\}$  (iii)  $\{d,b\}$  (iv)  $\{a,b\}$  (v)  $\{c,a\}$
- 

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

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

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

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

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

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

15. The equation of the line in slope intercept form is

a)  $x = my + c$

b)  $y = mx + c$

c)  $x = cy + m$

d)  $y = cx + m$

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

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16. The equation of the x-axis is

a)  $x = 0$

b)  $y = 1$

c)  $x = 1$

d)  $x = y$

e)  $y = 0$

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

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17. Which of the following lines pass through the origin?

(i)  $(7x - 2y) = 0$

(ii)  $(-8x + 2y - 34) = 0$

(iii)  $(5x - 9y - 33) = 0$

(iv)  $(9x + y - 25) = 0$

(v)  $(-6x + 6y - 30) = 0$

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

(i)  $(-4x + 8y) = 0$

(ii)  $(8x + y) = 0$

(iii)  $(3x + 4y + 40) = 0$

(iv)  $(2x - 7y) = 0$

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

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19. Find the set of points satisfying the equation  $(-5x - 15y + 30) = 0$

(i)  $((-2), \frac{8}{3}), ((-1), \frac{7}{3}), (0, 2), (1, \frac{5}{3}), (2, \frac{4}{3})$

(ii)  $((-2), \frac{8}{3}), ((-1), \frac{7}{3}), (0, 2), (1, \frac{5}{3}), (4, \frac{10}{3})$

(iii)  $(-2, \frac{8}{3}), (-1, \frac{7}{3}), (1, 1), (1, \frac{5}{3}), (2, \frac{4}{3})$

(iv)  $((-2), \frac{8}{3}), ((-1), \frac{7}{3}), (0, 2), (0, \frac{8}{3}), (2, \frac{4}{3})$

(v)  $((-2), \frac{8}{3}), ((-1), \frac{7}{3}), ((-2), 0), (1, \frac{5}{3}), (2, \frac{4}{3})$

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20. Find the set of points satisfying the equation  $y = (13x - 60)$

(i)  $((-2), (-86)), ((-1), (-73)), (1, (-61)), (1, (-47)), (2, (-34))$

(ii)  $((-2), (-86)), ((-1), (-73)), ((-2), (-62)), (1, (-47)), (2, (-34))$

(iii)  $((-2), (-86)), ((-1), (-73)), (0, (-60)), (0, (-46)), (2, (-34))$

(iv)  $((-2), (-86)), ((-1), (-73)), (0, (-60)), (1, (-47)), (2, (-34))$

(v)  $((-2), (-86)), ((-1), (-73)), (0, (-60)), (1, (-47)), (4, (-32))$

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21. Find the set of points satisfying the equation  $x = (-\frac{4}{5}y + \frac{31}{5})$

(i)  $((-2), \frac{41}{4}), ((-1), 9), (0, \frac{31}{4}), (0, \frac{15}{2}), (2, \frac{21}{4})$

(ii)  $((-2), \frac{41}{4}), ((-1), 9), ((-2), \frac{23}{4}), (1, \frac{13}{2}), (2, \frac{21}{4})$

(iii)  $((-2), \frac{41}{4}), ((-1), 9), (0, \frac{31}{4}), (1, \frac{13}{2}), (4, \frac{29}{4})$

(iv)  $((-2), \frac{41}{4}), ((-1), 9), (1, \frac{27}{4}), (1, \frac{13}{2}), (2, \frac{21}{4})$

(v)  $((-2), \frac{41}{4}), ((-1), 9), (0, \frac{31}{4}), (1, \frac{13}{2}), (2, \frac{21}{4})$

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22. Find the set of points satisfying the equation  $y = \frac{1}{3}x$

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

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

(iii)  $((-2), (-\frac{2}{3})), ((-1), (-\frac{1}{3})), (0, 0), (1, \frac{1}{3}), (4, \frac{8}{3})$

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

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

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23. Find the set of points satisfying the equation  $(3x + 16y - 2) = 0$

(i)  $((-2), \frac{1}{2}), ((-1), \frac{5}{16}), (0, \frac{1}{8}), (1, (-\frac{1}{16})), (2, (-\frac{1}{4}))$

(ii)  $((-2), \frac{1}{2}), ((-1), \frac{5}{16}), (0, \frac{1}{8}), (0, \frac{15}{16}), (2, (-\frac{1}{4}))$

(iii)  $((-2), \frac{1}{2}), ((-1), \frac{5}{16}), ((-2), (-\frac{15}{8})), (1, (-\frac{1}{16})), (2, (-\frac{1}{4}))$

$$(iv) \left( (-2), \frac{1}{2} \right), \left( (-1), \frac{5}{16} \right), \left( 1, \left( -\frac{7}{8} \right) \right), \left( 1, \left( -\frac{1}{16} \right) \right), \left( 2, \left( -\frac{1}{4} \right) \right)$$

$$(v) \left( (-2), \frac{1}{2} \right), \left( (-1), \frac{5}{16} \right), \left( 0, \frac{1}{8} \right), \left( 1, \left( -\frac{1}{16} \right) \right), \left( 4, \frac{7}{4} \right)$$


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24. Find the set of points satisfying the equation  $y = 5$

$$(i) \left( (-2), 5 \right), \left( (-1), 5 \right), \left( (-2), 3 \right), \left( 1, 5 \right), \left( 2, 5 \right)$$

$$(ii) \left( (-2), 5 \right), \left( (-1), 5 \right), \left( 0, 5 \right), \left( 1, 5 \right), \left( 4, 7 \right)$$

$$(iii) \left( (-2), 5 \right), \left( (-1), 5 \right), \left( 0, 5 \right), \left( 1, 5 \right), \left( 2, 5 \right)$$

$$(iv) \left( (-2), 5 \right), \left( (-1), 5 \right), \left( 1, 4 \right), \left( 1, 5 \right), \left( 2, 5 \right)$$

$$(v) \left( (-2), 5 \right), \left( (-1), 5 \right), \left( 0, 5 \right), \left( 0, 6 \right), \left( 2, 5 \right)$$


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25. Find the set of points satisfying the equation  $x = (-4)$

$$(i) \left( (-4), (-2) \right), \left( (-4), (-1) \right), \left( (-3), (-1) \right), \left( (-4), 1 \right), \left( (-4), 2 \right)$$

$$(ii) \left( (-4), (-2) \right), \left( (-4), (-1) \right), \left( (-4), 0 \right), \left( (-4), 1 \right), \left( (-2), 4 \right)$$

$$(iii) \left( (-4), (-2) \right), \left( (-4), (-1) \right), \left( (-4), 0 \right), \left( (-5), 2 \right), \left( (-4), 2 \right)$$

$$(iv) \left( (-4), (-2) \right), \left( (-4), (-1) \right), \left( (-6), (-2) \right), \left( (-4), 1 \right), \left( (-4), 2 \right)$$

$$(v) \left( (-4), (-2) \right), \left( (-4), (-1) \right), \left( (-4), 0 \right), \left( (-4), 1 \right), \left( (-4), 2 \right)$$


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Which of the following equations satisfy the given points

$$26. \left( (-2), \frac{95}{13} \right), \left( (-1), \frac{84}{13} \right), \left( 0, \frac{73}{13} \right), \left( 1, \frac{62}{13} \right), \left( 2, \frac{51}{13} \right) ?$$

$$(i) (-11x - 13y + 73) = 0$$

$$(ii) (7x + 7y - 6) = 0$$

$$(iii) y = \left( -\frac{11}{13}x - \frac{29}{13} \right)$$

$$(iv) x = 8$$

$$(v) y = (-9)$$


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Which of the following equations satisfy the given points

$$27. \left( (-2), \frac{19}{5} \right), \left( (-1), \frac{12}{5} \right), \left( 0, 1 \right), \left( 1, \left( -\frac{2}{5} \right) \right), \left( 2, \left( -\frac{9}{5} \right) \right) ?$$

$$(i) x = 0$$

$$(ii) y = \left( -\frac{7}{5}x + 1 \right)$$

$$(iii) y = 1$$

$$(iv) \quad x = \left( \frac{7}{5}y - \frac{7}{5} \right)$$

$$(v) \quad (-14x - 10y + 14) = 0$$


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Which of the following equations satisfy the given points

$$28. \quad \left( (-2), \frac{8}{5} \right), \left( (-1), \frac{1}{1} \right), \left( 0, \frac{2}{5} \right), \left( 1, \left( -\frac{1}{5} \right) \right), \left( 2, \left( -\frac{4}{5} \right) \right) ?$$

$$(i) \quad y = \left( -\frac{3}{2}x + \frac{1}{2} \right)$$

$$(ii) \quad x = \left( \frac{3}{2}y + 9 \right)$$

$$(iii) \quad y = (-4)$$

$$(iv) \quad (3x + 5y - 2) = 0$$

$$(v) \quad (-15x - 10y - 30) = 0$$


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Which of the following equations satisfy the given points

$$29. \quad \left( (-2), (-4) \right), \left( (-1), (-4) \right), \left( 0, (-4) \right), \left( 1, (-4) \right), \left( 2, (-4) \right) ?$$

$$(i) \quad x = \left( \frac{11}{12}y - \frac{16}{3} \right)$$

$$(ii) \quad (2x + 6y - 1) = 0$$

$$(iii) \quad y = (-4)$$

$$(iv) \quad (-11x - 12y + 51) = 0$$

$$(v) \quad y = \left( -\frac{11}{12}x - \frac{49}{4} \right)$$


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Which of the following equations satisfy the given points

$$30. \quad \left( (-8), (-2) \right), \left( (-8), (-1) \right), \left( (-8), 0 \right), \left( (-8), 1 \right), \left( (-8), 2 \right) ?$$

$$(i) \quad y = \left( -\frac{5}{8}x - 7 \right)$$

$$(ii) \quad x = (-8)$$

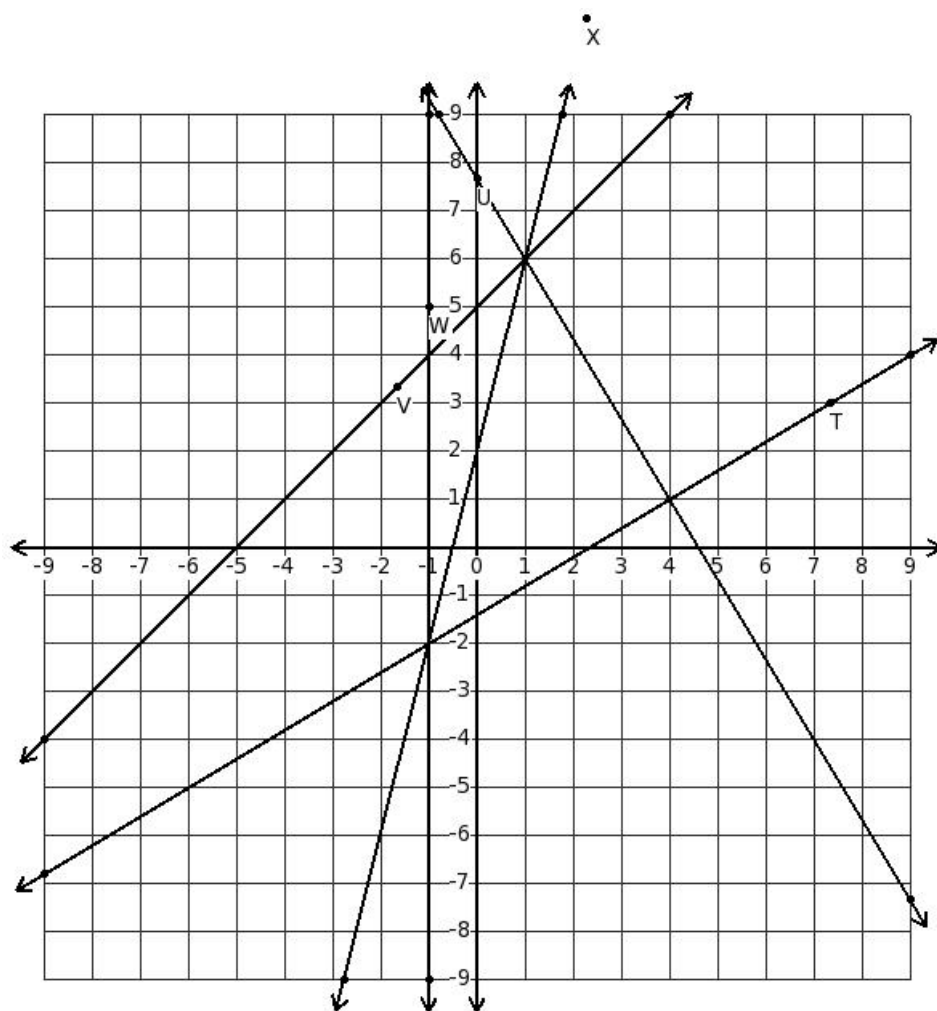
$$(iii) \quad (10x + 9y - 5) = 0$$

$$(iv) \quad x = \left( \frac{5}{8}y - \frac{27}{4} \right)$$

$$(v) \quad y = (-2)$$

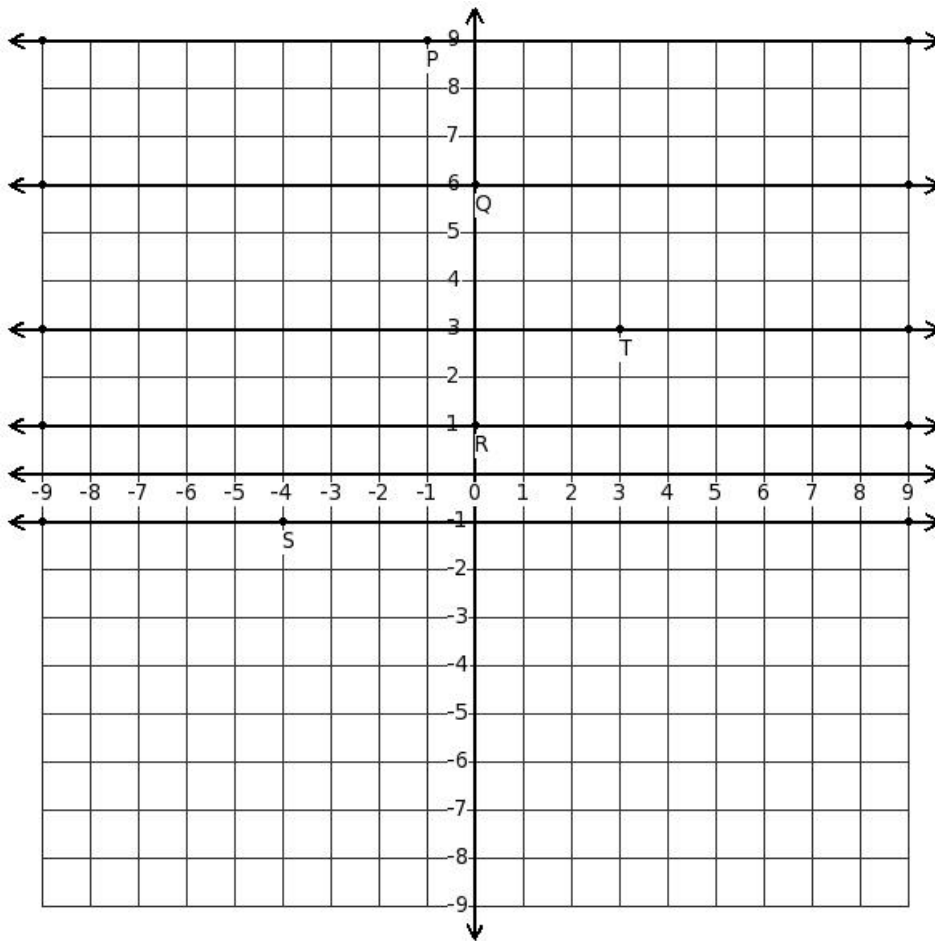

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$$31. \quad \text{Which of the displayed lines represent the equation } (3x - 5y - 7) = 0 ?$$



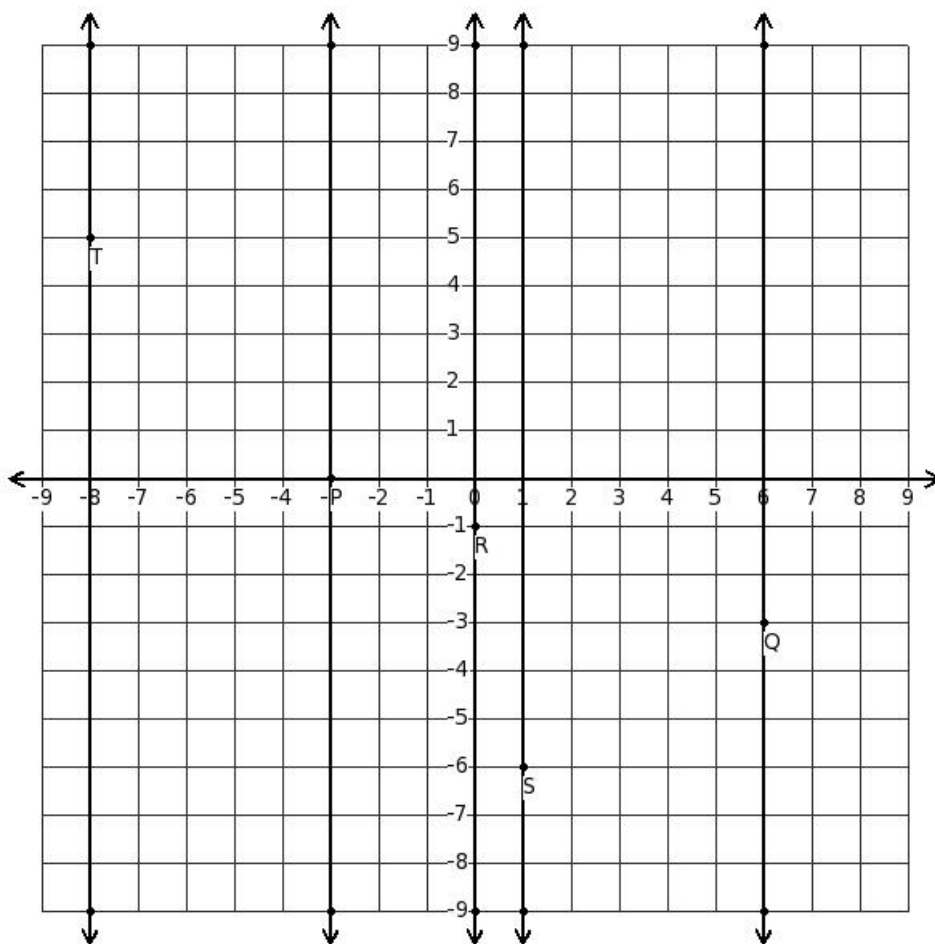
- (i) line with point X
- (ii) line with point W
- (iii) line with point T
- (iv) line with point U
- (v) line with point V

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



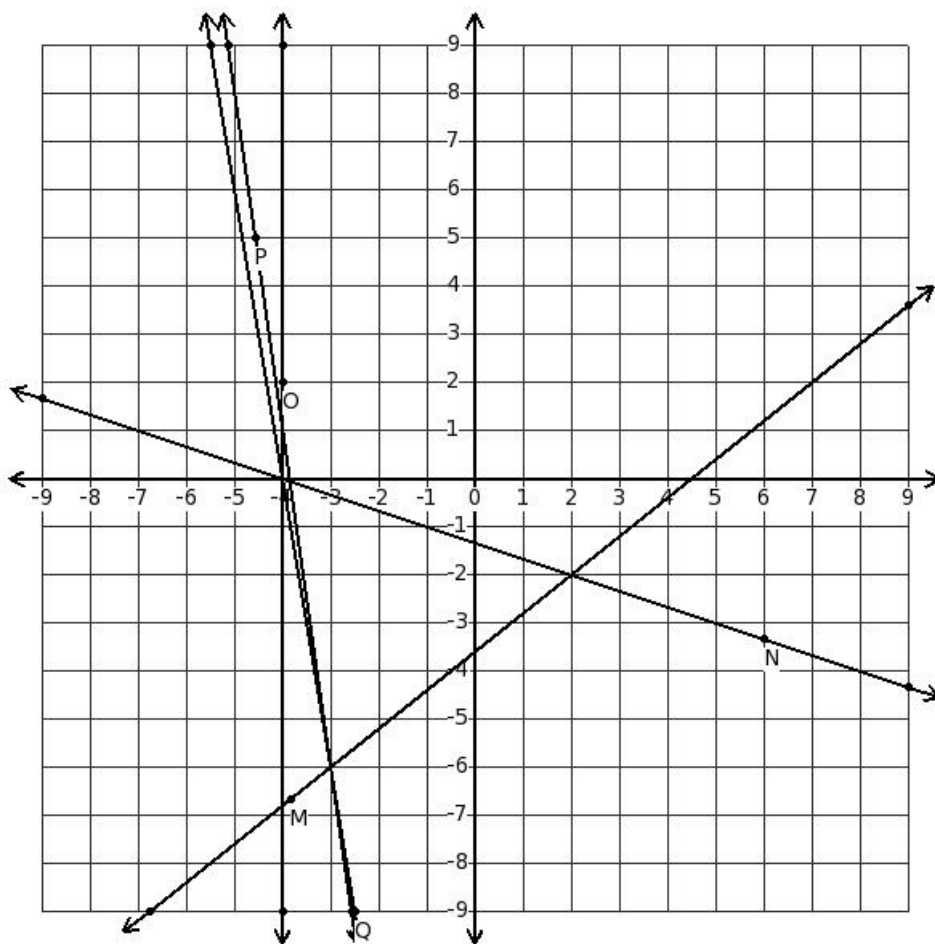
- (i) line with point T
- (ii) line with point S
- (iii) line with point R
- (iv) line with point Q
- (v) line with point P

33. Which of the displayed lines represent the equation  $x = -3$  ?



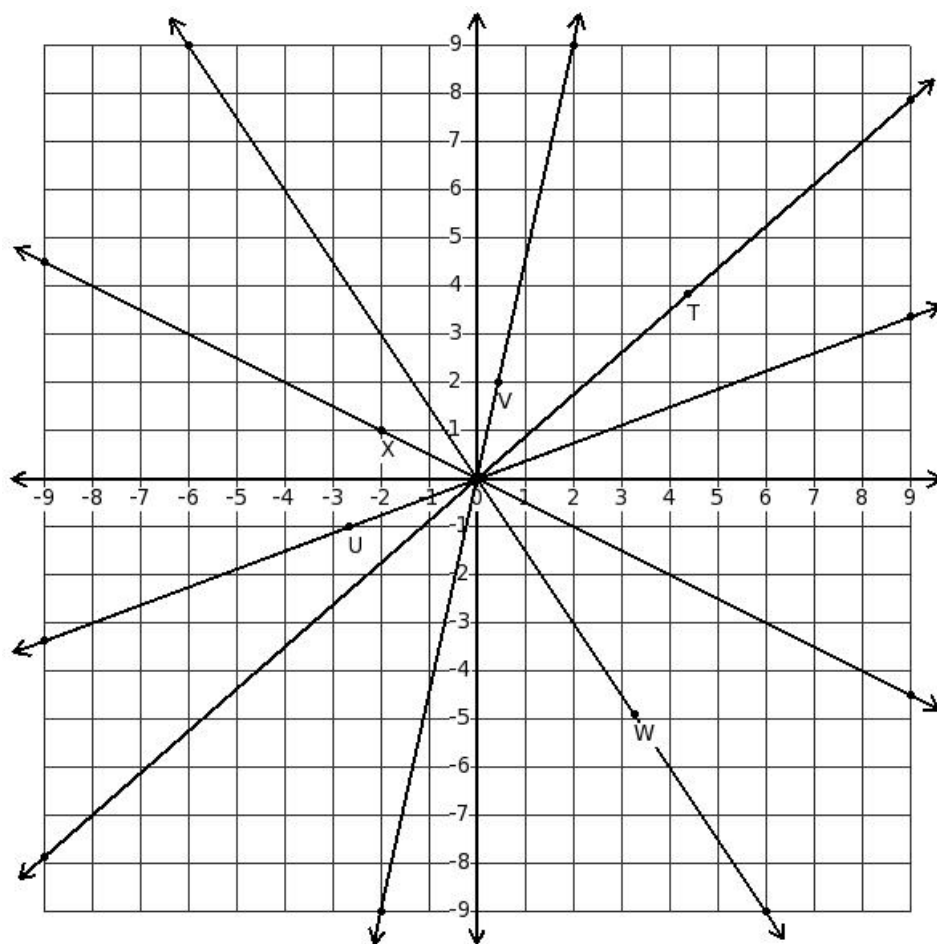
- (i) line with point S
- (ii) line with point R
- (iii) line with point Q
- (iv) line with point T
- (v) line with point P

34. Which of the displayed lines represent the equation  $y = \left( \frac{4}{5}x - \frac{18}{5} \right)$



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

35. Which of the displayed lines represent the equation  $y = \frac{7}{8}x$



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

**Assignment Key**

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- 1) (i)
- 2) (ii)
- 3) (i)
- 4) (i)
- 5) (iv)
- 6) (ii)
- 7) (iii)
- 8) (ii)
- 9) (iv)
- 10) (iv)
- 11) (iv)
- 12) (iv)
- 13) (iv)
- 14) (v)
- 15) (i)
- 16) (i)
- 17) (i)
- 18) (iii)
- 19) (i)
- 20) (iv)
- 21) (v)
- 22) (v)
- 23) (i)
- 24) (iii)
- 25) (v)
- 26) (i)
- 27) (ii)
- 28) (iv)
- 29) (iii)
- 30) (ii)
- 31) (iii)
- 32) (v)
- 33) (v)
- 34) (iii)
- 35) (iii)