EduSahara™ Learning Center Assignment

Grade : Class IX, ICSE
Chapter : Linear Equations and Simultaneous Linear Equations
Name : Graph of Linear Equation

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1. The equation of x-axis is

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

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2. The equation of y-axis is

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

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3. Any line parallel to x-axis is

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

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4. Any line parallel to y-axis is

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

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

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

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

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

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

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

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

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

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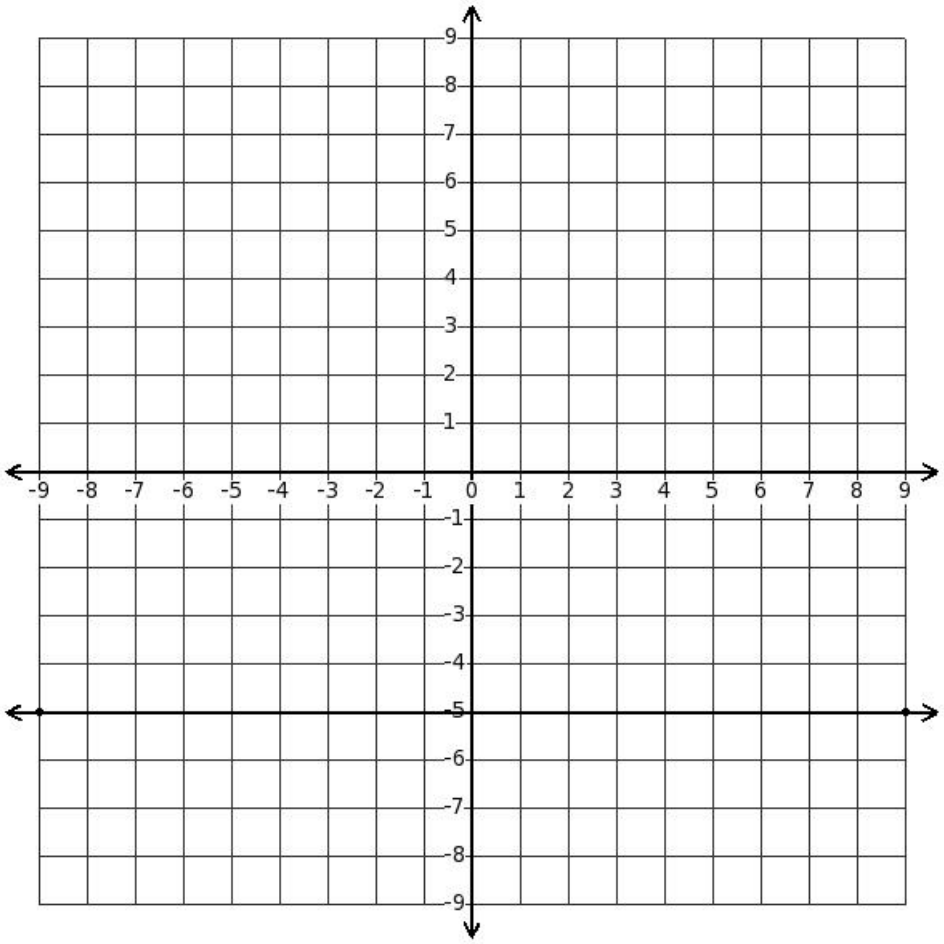
9. Find the equation of the displayed line



(i) $x = (-5)$ (ii) $y = (-4)$ (iii) $y = (-6)$

(iv) $y = (-5)$ (v) $3y = (-5)$

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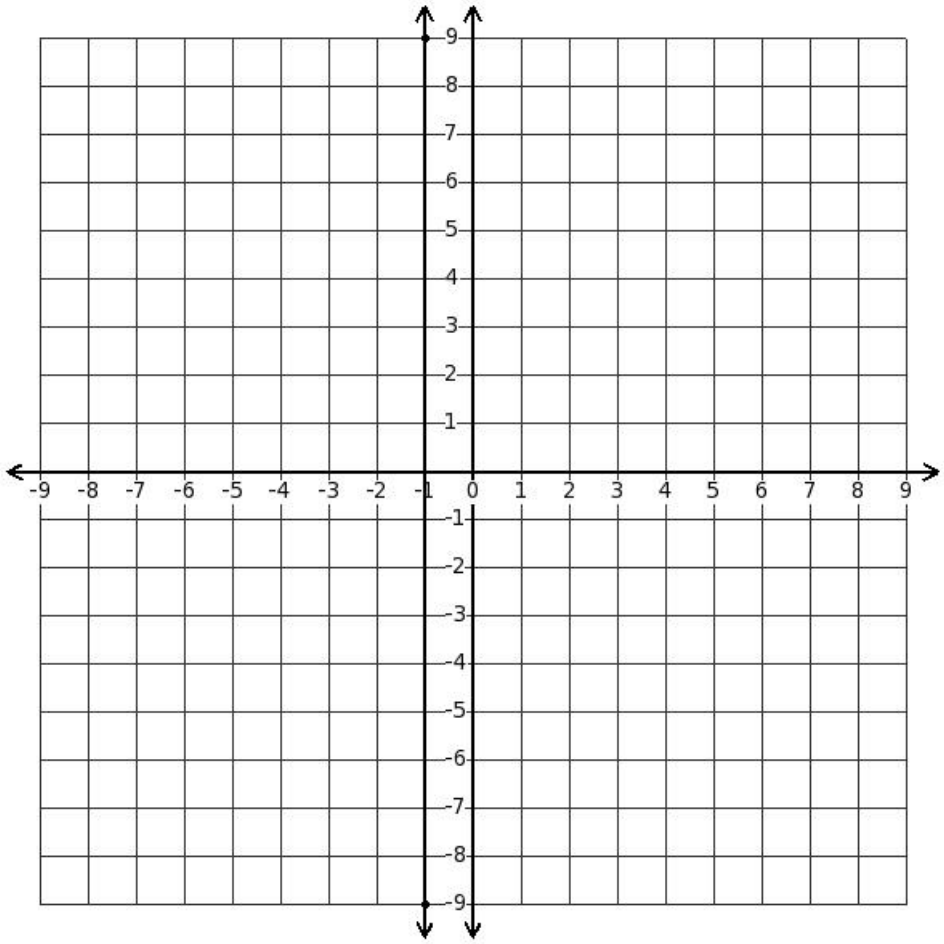
10. Find the equation of the displayed line



(i) $x = 0$ (ii) $3x = (-1)$ (iii) $x = (-1)$

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

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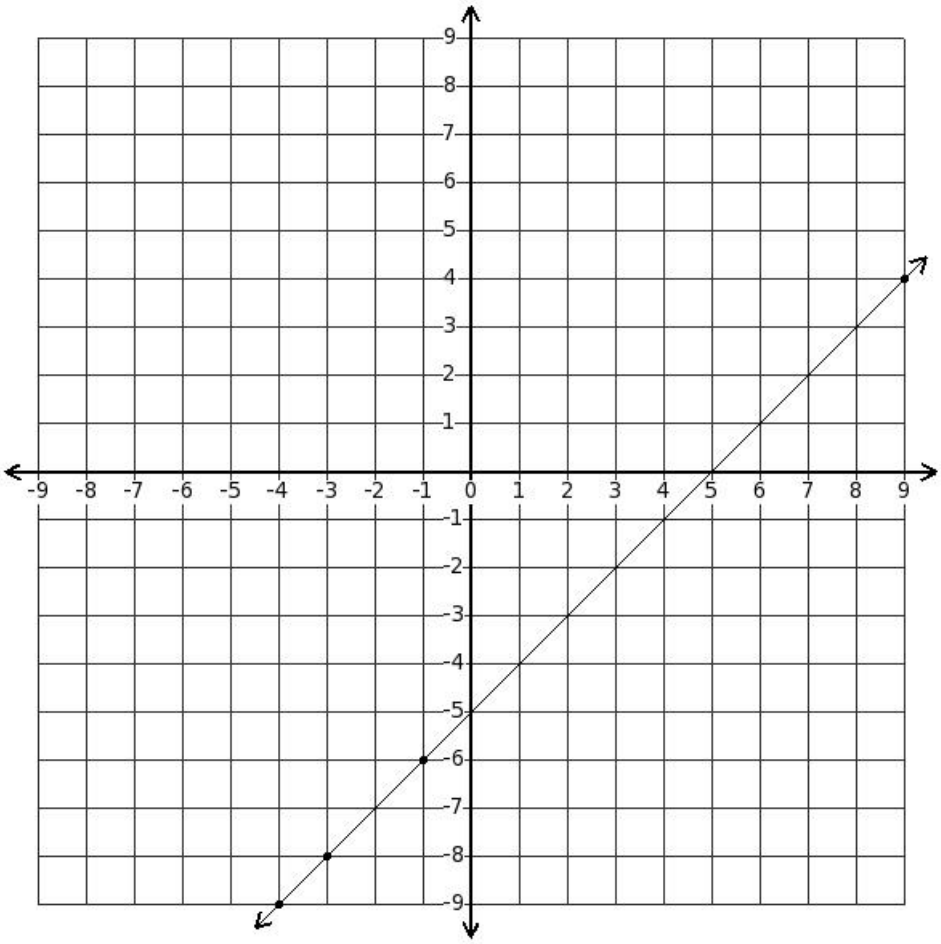
11. Find the equation of the line passing through the points $((-3),(-8))$ and $((-1),(-6))$



(i) $(-2x + 2y + 8) = 0$

(ii) $(2x - 2y - 10) = 0$

(iii) $(x - 2y - 10) = 0$

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

(v) $(3x - 2y - 10) = 0$

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12. The equation of the x-axis is

a) $x = 0$

b) $x = 1$

c) $y = 1$

d) $x = y$

e) $y = 0$

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

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

(i) $(x - 6y) = 0$

(ii) $(-4x + 6y - 10) = 0$

(iii) $(-4x -9y -55) = 0$

(iv) $(8x -4y -44) = 0$

(v) $(7y -7) = 0$

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

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

(ii) $(3x +8y +32) = 0$

(iii) $(-x -7y) = 0$

(iv) $(7x +5y) = 0$

(v) $(4x -3y) = 0$

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15. Find the set of points satisfying the equation $(-13x -2y -47) = 0$

(i) $((-2),(-\frac{21}{2})),((-1),(-17)),(0,(-\frac{47}{2})),(1,(-30)),(4,(-\frac{69}{2}))$

(ii) $((-2),(-\frac{21}{2})),((-1),(-17)),(0,(-\frac{47}{2})),(1,(-30)),(2,(-\frac{73}{2}))$

(iii) $((-2),(-\frac{21}{2})),((-1),(-17)),((-2),(-\frac{51}{2})),(1,(-30)),(2,(-\frac{73}{2}))$

(iv) $((-2),(-\frac{21}{2})),((-1),(-17)),(0,(-\frac{47}{2})),(0,(-29)),(2,(-\frac{73}{2}))$

(v) $((-2),(-\frac{21}{2})),((-1),(-17)),(1,(-\frac{49}{2})),(1,(-30)),(2,(-\frac{73}{2}))$

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

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

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

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

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

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

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17. Find the set of points satisfying the equation $x = (\frac{7}{11}y + \frac{30}{11})$

(i) $((-2),(-\frac{52}{7})),((-1),(-\frac{41}{7})),(0,(-\frac{30}{7})),(0,(-\frac{12}{7})),(2,(-\frac{8}{7}))$

(ii) $((-2),(-\frac{52}{7})),((-1),(-\frac{41}{7})),(0,(-\frac{30}{7})),(1,(-\frac{19}{7})),(4,\frac{6}{7})$

(iii) $((-2),(-\frac{52}{7})),((-1),(-\frac{41}{7})),(0,(-\frac{30}{7})),(1,(-\frac{19}{7})),(2,(-\frac{8}{7}))$

(iv) $((-2),(-\frac{52}{7})),((-1),(-\frac{41}{7})),((-2),(-\frac{44}{7})),(1,(-\frac{19}{7})),(2,(-\frac{8}{7}))$

(v) $((-2),(-\frac{52}{7})),((-1),(-\frac{41}{7})),(1,(-\frac{37}{7})),(1,(-\frac{19}{7})),(2,(-\frac{8}{7}))$

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18. Find the set of points satisfying the equation $y = (-\frac{5}{8}x)$

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

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

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

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

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

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19. Find the set of points satisfying the equation $(63x + 18y - 14) = 0$

(i) $((-2),\frac{70}{9}),((-1),\frac{77}{18}),((-2),(-\frac{11}{9})),(1,(-\frac{49}{18})),(2,(-\frac{56}{9}))$

(ii) $((-2),\frac{70}{9}),((-1),\frac{77}{18}),(1,(-\frac{2}{9})),(1,(-\frac{49}{18})),(2,(-\frac{56}{9}))$

(iii) $((-2),\frac{70}{9}),((-1),\frac{77}{18}),(0,\frac{7}{9}),(0,(-\frac{31}{18})),(2,(-\frac{56}{9}))$

(iv) $((-2),\frac{70}{9}),((-1),\frac{77}{18}),(0,\frac{7}{9}),(1,(-\frac{49}{18})),(4,(-\frac{38}{9}))$

(v) $((-2),\frac{70}{9}),((-1),\frac{77}{18}),(0,\frac{7}{9}),(1,(-\frac{49}{18})),(2,(-\frac{56}{9}))$

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20. Find the set of points satisfying the equation $y = (-2)$

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

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

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

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

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

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21. Find the set of points satisfying the equation $x = 4$

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

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

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

(iv) $(4,(-2)),(4,(-1)),(5,(-1)),(4,1),(4,2)$

(v) $(4,(-2)),(4,(-1)),(4,0),(3,2),(4,2)$

Which of the following equations satisfy the given points

22. $((-2), \frac{33}{7}), ((-1), \frac{27}{7}), (0, 3), (1, \frac{15}{7}), (2, \frac{9}{7})$?

(i) $x = (\frac{6}{7}y - \frac{62}{7})$

(ii) $x = (-8)$

(iii) $y = (-\frac{6}{7}x - \frac{41}{7})$

(iv) $(9x + 8y - 6) = 0$

(v) $(-12x - 14y + 42) = 0$

Which of the following equations satisfy the given points

23. $((-2), 17), ((-1), \frac{47}{3}), (0, \frac{43}{3}), (1, 13), (2, \frac{35}{3})$?

(i) $(4x + 15y - 3) = 0$

(ii) $y = (-\frac{4}{3}x + \frac{43}{3})$

(iii) $(-8x - 6y - 12) = 0$

(iv) $x = (\frac{4}{3}y - 8)$

(v) $x = 4$

Which of the following equations satisfy the given points

24. $((-2), \frac{19}{4}), ((-1), \frac{5}{2}), (0, \frac{1}{4}), (1, (-2)), (2, (-\frac{17}{4}))$?

(i) $x = (-7)$

(ii) $(-14x - 9y - 40) = 0$

(iii) $(9x + 4y - 1) = 0$

(iv) $y = (-\frac{14}{9}x - \frac{26}{9})$

(v) $x = (\frac{14}{9}y - \frac{175}{9})$

Which of the following equations satisfy the given points

25. $((-2), 3), ((-1), 3), (0, 3), (1, 3), (2, 3)$?

(i) $y = 3$

(ii) $x = (\frac{3}{2}y - \frac{7}{2})$

(iii) $(-6x - 4y + 6) = 0$

(iv) $(6x + 4y - 1) = 0$

(v) $y = (-\frac{3}{2}x + \frac{9}{2})$

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26. Which of the following equations satisfy the given points $(5 , (-2)) , (5 , (-1)) , (5 , 0) , (5 , 1) , (5 , 2)$?

(i) $(-12x - 17y - 28) = 0$

(ii) $y = 3$

(iii) $x = 5$

(iv) $(12x + 7y - 6) = 0$

(v) $y = (-\frac{12}{17}x + \frac{111}{17})$

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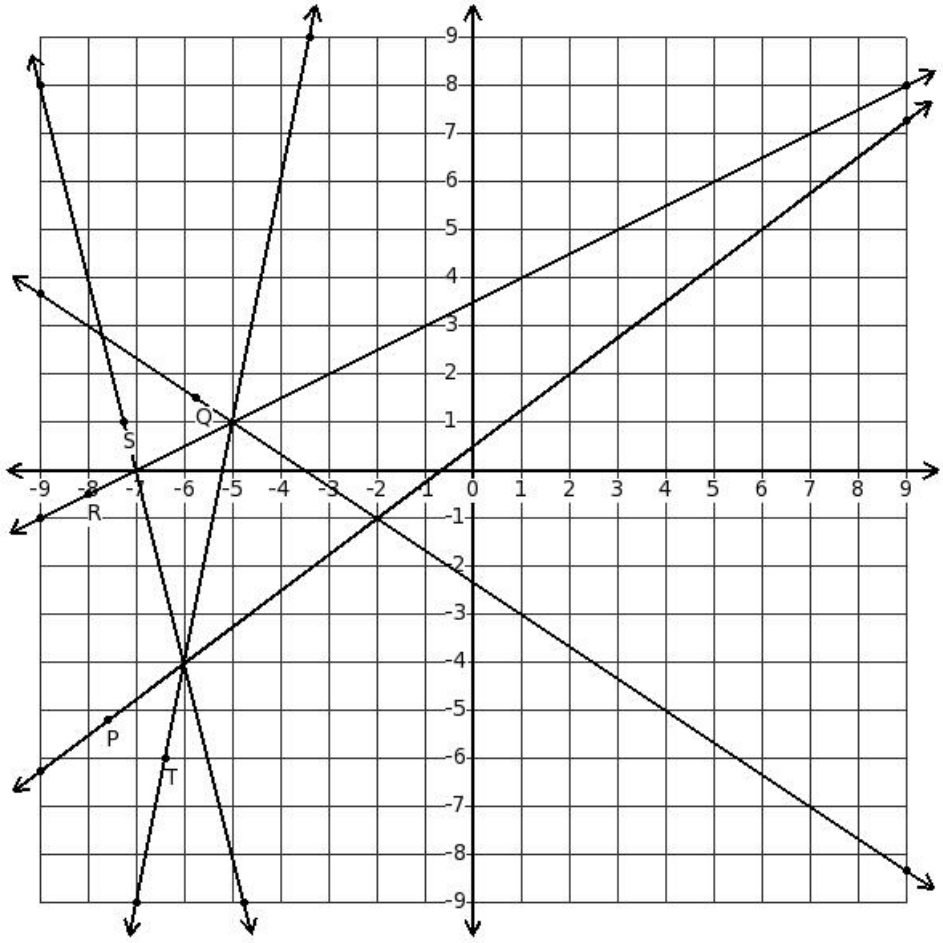
27. Which of the displayed lines represent the equation $(3x - 4y + 2) = 0$?



(i) line with point S

(ii) line with point P

(iii) line with point T

(iv) line with point R

(v) line with point Q

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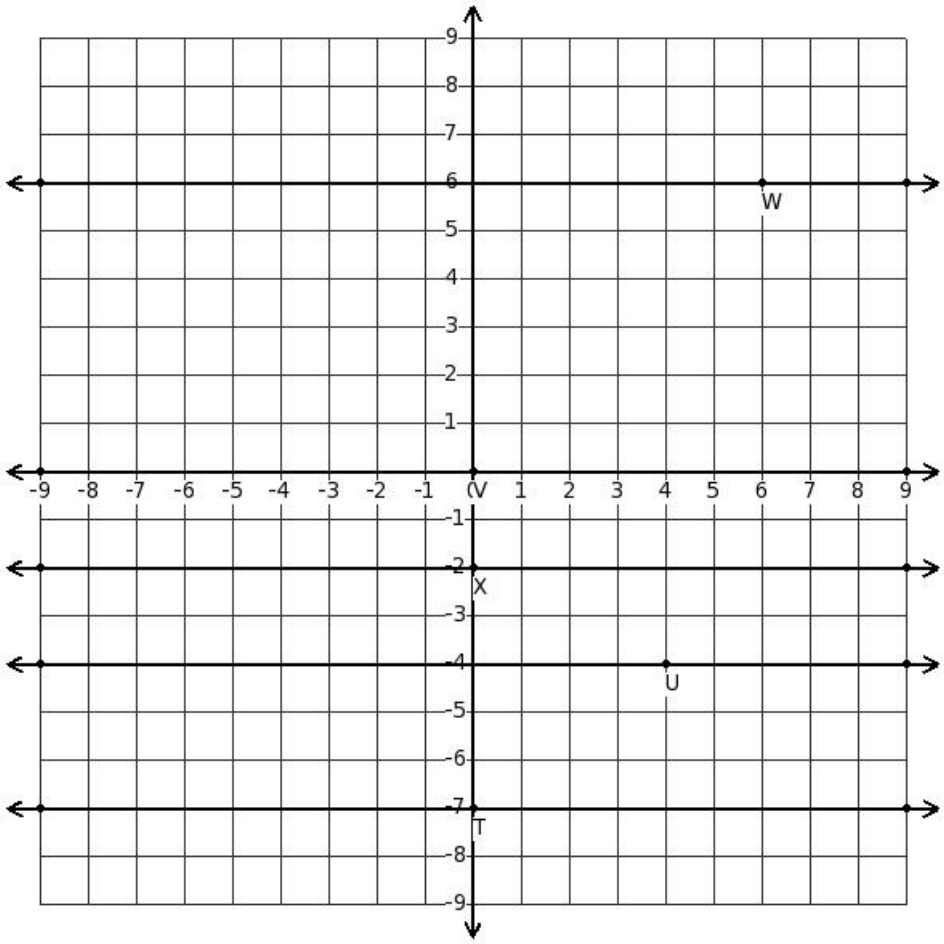
28. Which of the displayed lines represent the equation $y = (-7)$



(i) line with point U

(ii) line with point T

(iii) line with point V

(iv) line with point W

(v) line with point X

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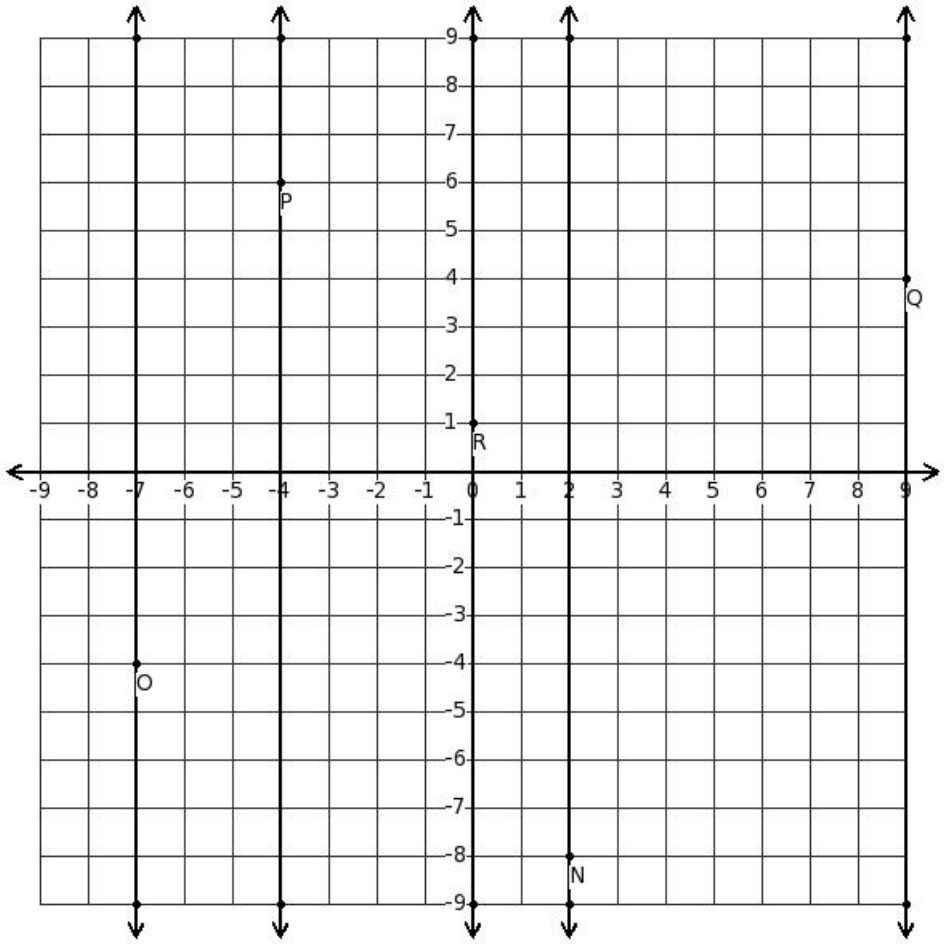
29. Which of the displayed lines represent the equation $x = 2$



(i) line with point N

(ii) line with point Q

(iii) line with point O

(iv) line with point R

(v) line with point P

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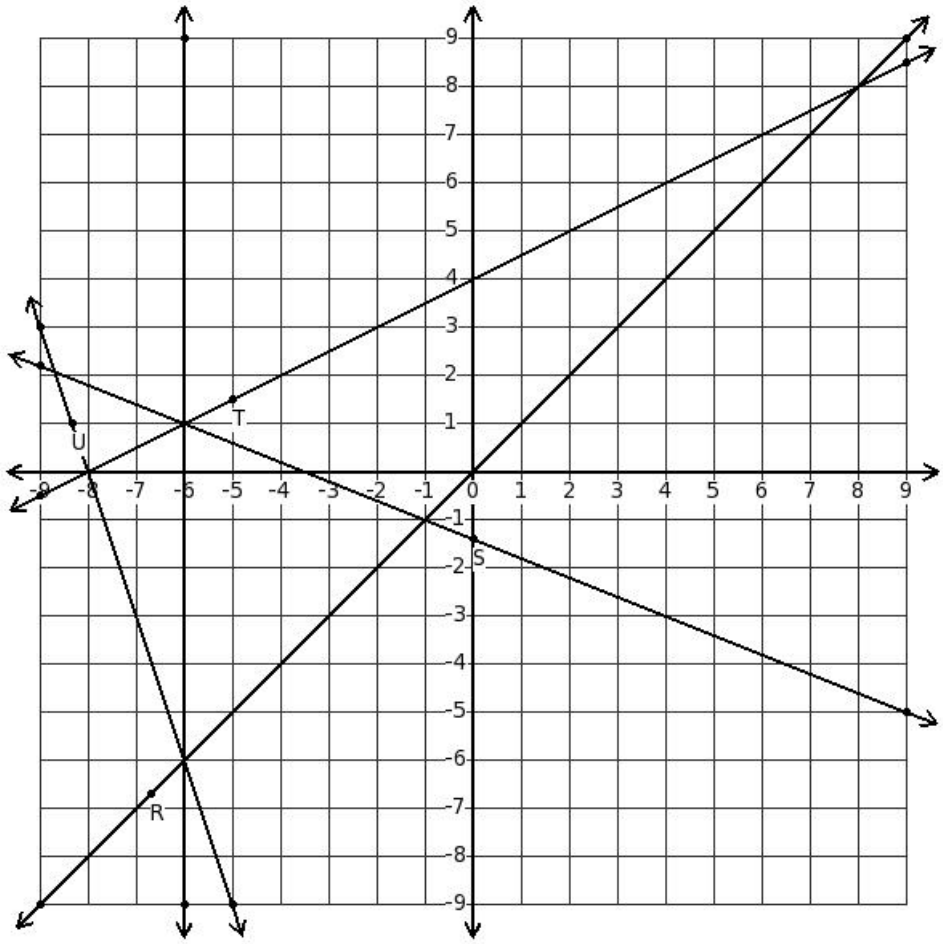
30. Which of the displayed lines represent the equation $y = x$



(i) line with point T

(ii) line with point V

(iii) line with point U

(iv) line with point R

(v) line with point S

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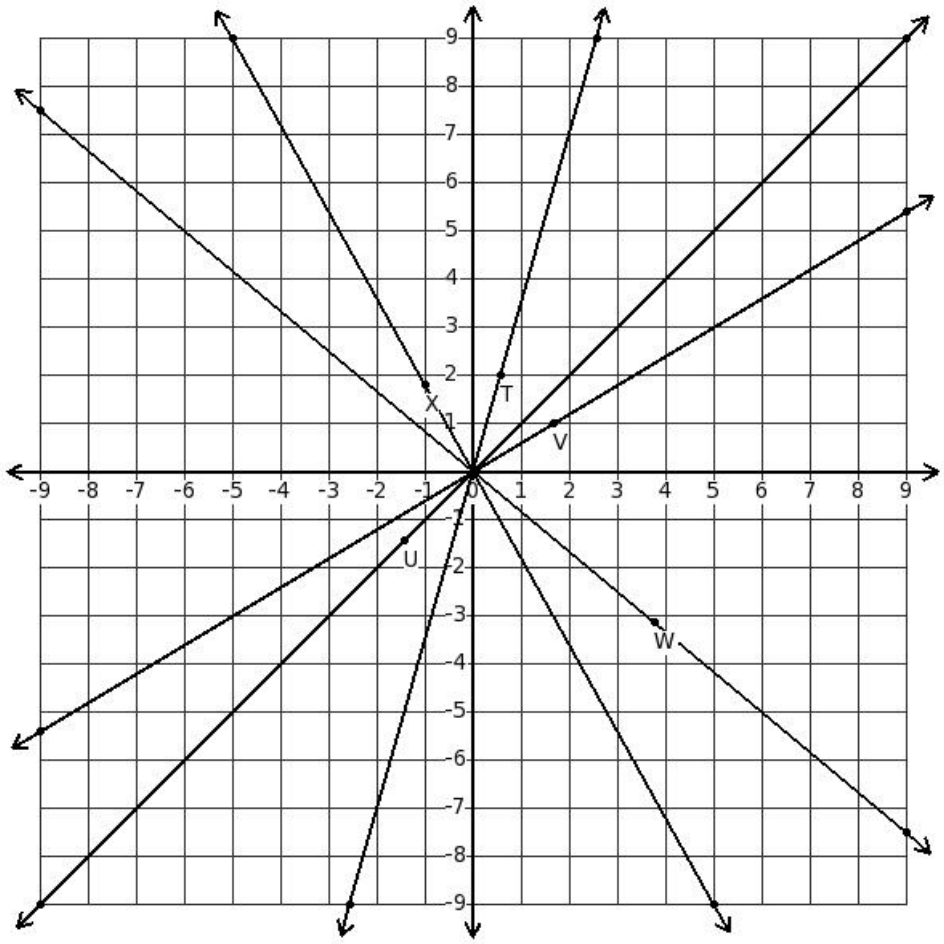
31. Which of the displayed lines represent the equation $y = \frac{7}{2}x$



(i) line with point V

(ii) line with point W

(iii) line with point U

(iv) line with point T

(v) line with point X

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32. Find the equation of a straight line parallel to x-axis and passing through the point $((-7),(-2))$

(i) $x = (-7)$ (ii) $y = (-2)$ (iii) $x = (-5)$

(iv) $y = (-3)$ (v) $y = 0$

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33. Find the equation of a straight line parallel to y-axis and passing through the point $(9,(-3))$

(i) $x = 9$ (ii) $x = 8$ (iii) $y = (-3)$

(iv) $y = (-1)$ (v) $x = 12$

Assignment Key

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