

EduSahara™ Learning Center Assignment

Grade : Class VII, ICSE

Chapter : Graphs

Name : Graphs of Linear Equations

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1. Find the set of points satisfying the equation $(-8x + 14y + 30) = 0$

(i) $((-2), (-\frac{23}{7})), ((-1), (-\frac{19}{7})), (0, (-\frac{15}{7})), (1, (-\frac{11}{7})), (2, (-1))$

(ii) $((-2), (-\frac{23}{7})), ((-1), (-\frac{19}{7})), (0, (-\frac{15}{7})), (1, (-\frac{11}{7})), (4, 1)$

(iii) $((-2), (-\frac{23}{7})), ((-1), (-\frac{19}{7})), ((-2), (-\frac{29}{7})), (1, (-\frac{11}{7})), (2, (-1))$

(iv) $((-2), (-\frac{23}{7})), ((-1), (-\frac{19}{7})), (0, (-\frac{15}{7})), (0, (-\frac{4}{7})), (2, (-1))$

(v) $((-2), (-\frac{23}{7})), ((-1), (-\frac{19}{7})), (1, (-\frac{22}{7})), (1, (-\frac{11}{7})), (2, (-1))$

2. Find the set of points satisfying the equation $y = (\frac{11}{8}x + \frac{9}{4})$

(i) $((-2), (-\frac{1}{2})), ((-1), \frac{7}{8}), (0, \frac{9}{4}), (1, \frac{29}{8}), (4, 7)$

(ii) $((-2), (-\frac{1}{2})), ((-1), \frac{7}{8}), (0, \frac{9}{4}), (1, \frac{29}{8}), (2, 5)$

(iii) $((-2), (-\frac{1}{2})), ((-1), \frac{7}{8}), (1, \frac{5}{4}), (1, \frac{29}{8}), (2, 5)$

(iv) $((-2), (-\frac{1}{2})), ((-1), \frac{7}{8}), (0, \frac{9}{4}), (0, \frac{37}{8}), (2, 5)$

(v) $((-2), (-\frac{1}{2})), ((-1), \frac{7}{8}), ((-2), \frac{1}{4}), (1, \frac{29}{8}), (2, 5)$

3. Find the set of points satisfying the equation $x = (\frac{5}{6}y - \frac{37}{6})$

(i) $((-2), 5), ((-1), \frac{31}{5}), (1, \frac{32}{5}), (1, \frac{43}{5}), (2, \frac{49}{5})$

(ii) $((-2), 5), ((-1), \frac{31}{5}), ((-2), \frac{27}{5}), (1, \frac{43}{5}), (2, \frac{49}{5})$

(iii) $((-2), 5), ((-1), \frac{31}{5}), (0, \frac{37}{5}), (1, \frac{43}{5}), (2, \frac{49}{5})$

(iv) $((-2), 5), ((-1), \frac{31}{5}), (0, \frac{37}{5}), (1, \frac{43}{5}), (4, \frac{59}{5})$

(v) $((-2), 5), ((-1), \frac{31}{5}), (0, \frac{37}{5}), (0, \frac{48}{5}), (2, \frac{49}{5})$

4. Find the set of points satisfying the equation $y = \frac{9}{5}x$

- (i) $((-2), (-\frac{18}{5})), ((-1), (-\frac{9}{5})), (0,0), (0, \frac{14}{5}), (2, \frac{18}{5})$
 - (ii) $((-2), (-\frac{18}{5})), ((-1), (-\frac{9}{5})), (0,0), (1, \frac{9}{5}), (2, \frac{18}{5})$
 - (iii) $((-2), (-\frac{18}{5})), ((-1), (-\frac{9}{5})), (1, (-1)), (1, \frac{9}{5}), (2, \frac{18}{5})$
 - (iv) $((-2), (-\frac{18}{5})), ((-1), (-\frac{9}{5})), (0,0), (1, \frac{9}{5}), (4, \frac{28}{5})$
 - (v) $((-2), (-\frac{18}{5})), ((-1), (-\frac{9}{5})), ((-2), (-2)), (1, \frac{9}{5}), (2, \frac{18}{5})$
-

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

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

6. Find the set of points satisfying the equation $y = (-4)$

- (i) $((-2), (-4)), ((-1), (-4)), ((-2), (-6)), (1, (-4)), (2, (-4))$
 - (ii) $((-2), (-4)), ((-1), (-4)), (0, (-4)), (1, (-4)), (2, (-4))$
 - (iii) $((-2), (-4)), ((-1), (-4)), (1, (-5)), (1, (-4)), (2, (-4))$
 - (iv) $((-2), (-4)), ((-1), (-4)), (0, (-4)), (1, (-4)), (4, (-2))$
 - (v) $((-2), (-4)), ((-1), (-4)), (0, (-4)), (0, (-3)), (2, (-4))$
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7. Find the set of points satisfying the equation $x = 7$

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

$$(v) \ (7, (-2)), (7, (-1)), (7, 0), (7, 1), (9, 4)$$

Which of the following equations satisfy the given points

8. $((-2), (-\frac{1}{7})), ((-1), (-\frac{12}{7})), (0, (-\frac{23}{7})), (1, (-\frac{34}{7})), (2, (-\frac{45}{7})) ?$

(i) $(-11x - 7y - 23) = 0$

(ii) $y = (-5)$

(iii) $y = (-\frac{11}{7}x - \frac{46}{7})$

(iv) $x = (\frac{11}{7}y + \frac{48}{7})$

(v) $x = (-1)$

Which of the following equations satisfy the given points

9. $((-2), (-10)), ((-1), (-\frac{21}{2})), (0, (-11)), (1, (-\frac{23}{2})), (2, (-12)) ?$

(i) $y = (-9)$

(ii) $x = (-4)$

(iii) $x = (\frac{1}{2}y + \frac{1}{2})$

(iv) $y = (-\frac{1}{2}x - 11)$

(v) $(-7x - 14y + 35) = 0$

Which of the following equations satisfy the given points

10. $((-2), 5), ((-1), \frac{11}{4}), (0, \frac{1}{2}), (1, (-\frac{7}{4})), (2, (-4)) ?$

(i) $x = (\frac{10}{11}y - \frac{39}{11})$

(ii) $x = (-9)$

(iii) $y = (-\frac{10}{11}x - \frac{156}{11})$

(iv) $y = (-6)$

(v) $(9x + 4y - 2) = 0$

Which of the following equations satisfy the given points

11. $((-2), 9), ((-1), 9), (0, 9), (1, 9), (2, 9) ?$

(i) $(-9x - 9y + 45) = 0$

(ii) $y = 9$

(iii) $x = (y - 18)$

(iv) $x = (-9)$

(v) $(3x + 4y - 2) = 0$

Which of the following equations satisfy the given points

12. $(9, (-2)), (9, (-1)), (9, 0), (9, 1), (9, 2) ?$

(i) $x = 9$

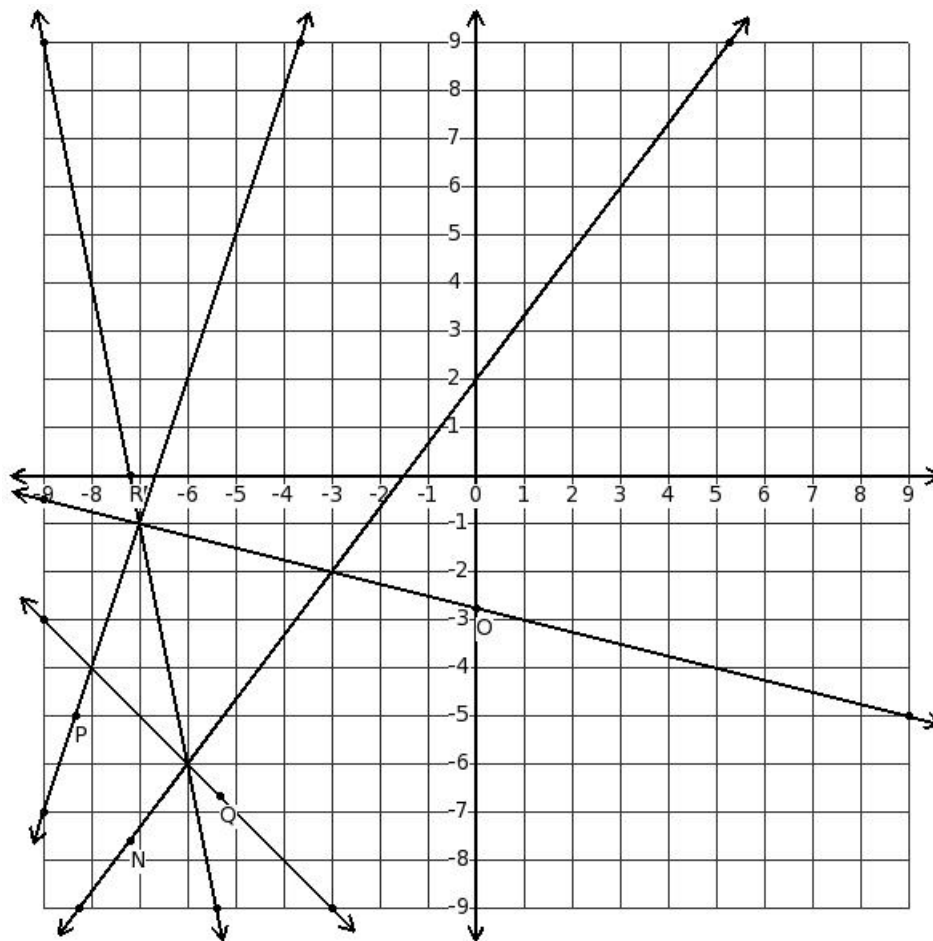
(ii) $y = (-1)$

(iii) $x = (\frac{7}{3}y + \frac{34}{3})$

(iv) $(7x + 12y - 4) = 0$

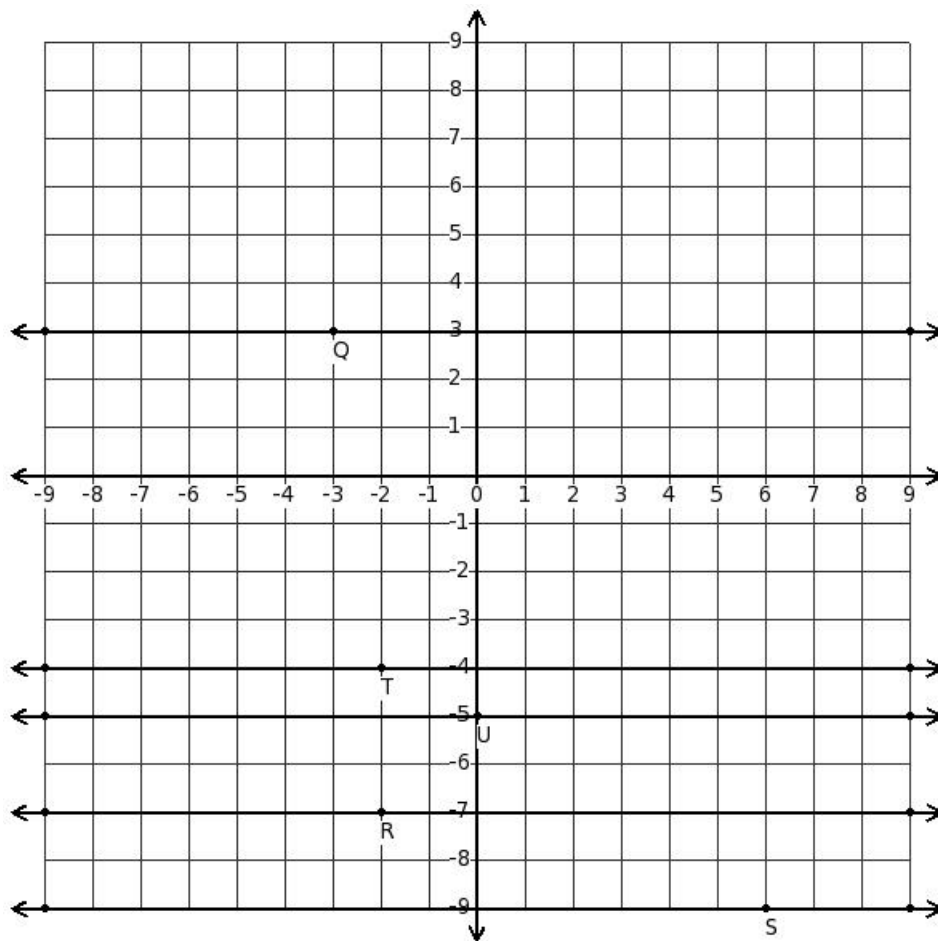
(v) $(-7x - 3y - 11) = 0$

13. Which of the displayed lines represent the equation $(4x - 3y + 6) = 0 ?$



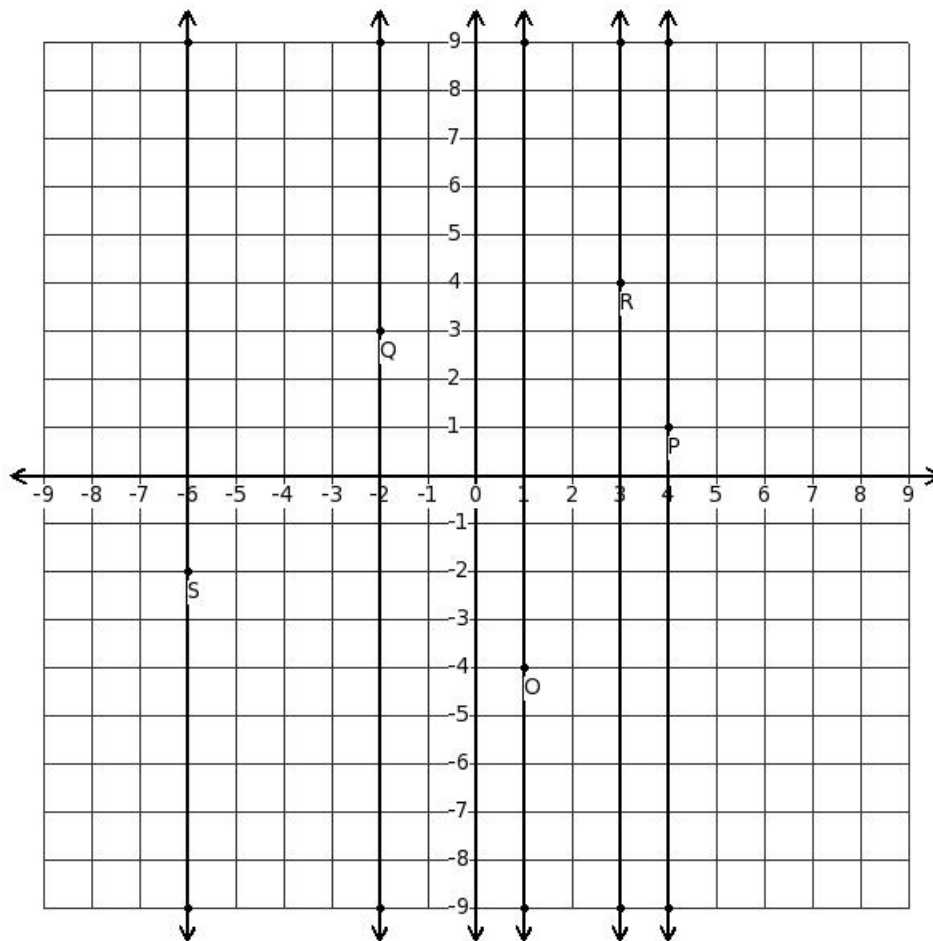
- (i) line with point P
- (ii) line with point Q
- (iii) line with point R
- (iv) line with point N
- (v) line with point O

14. Which of the displayed lines represent the equation $y = 3$



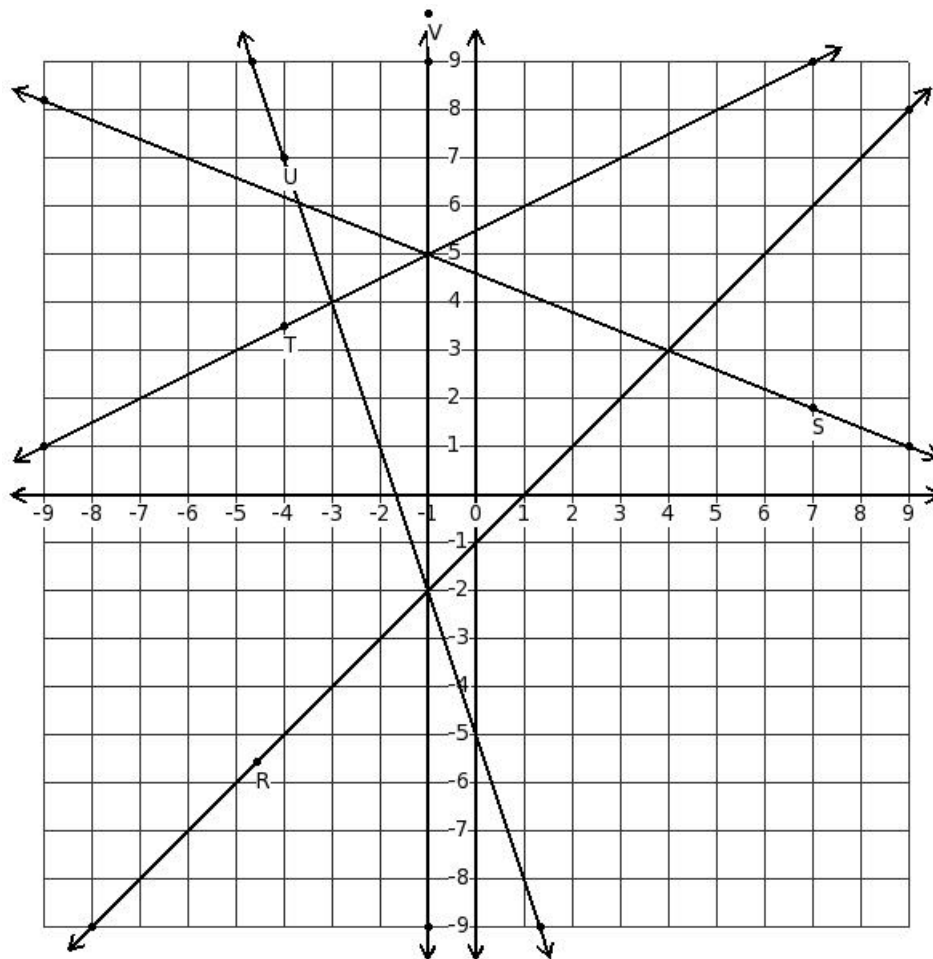
- (i) line with point Q
- (ii) line with point S
- (iii) line with point U
- (iv) line with point T
- (v) line with point R

15. Which of the displayed lines represent the equation $x = 1$



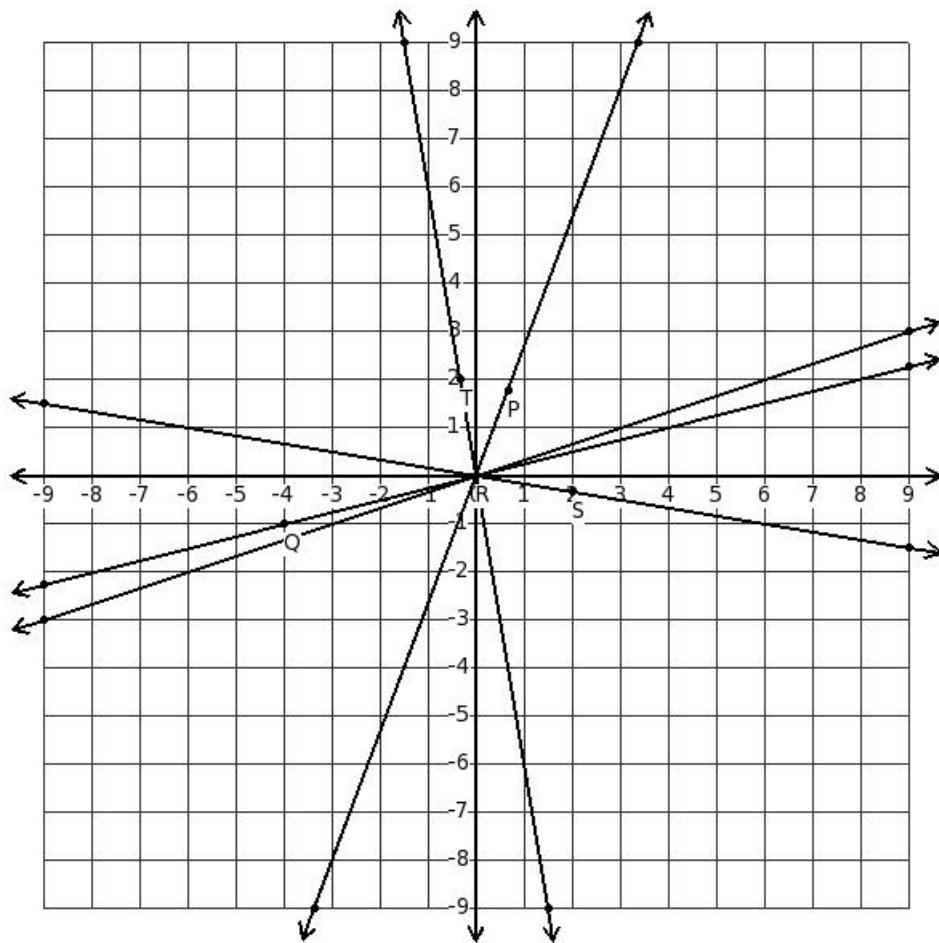
- (i) line with point R
- (ii) line with point P
- (iii) line with point S
- (iv) line with point Q
- (v) line with point O

16. Which of the displayed lines represent the equation $y = (x - 1)$



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

17. Which of the displayed lines represent the equation $y = \frac{8}{3}x$



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

Assignment Key

- 1) (i)
- 2) (ii)
- 3) (iii)
- 4) (ii)
- 5) (ii)
- 6) (ii)
- 7) (ii)
- 8) (i)
- 9) (iv)
- 10) (v)
- 11) (ii)
- 12) (i)
- 13) (iv)
- 14) (i)
- 15) (v)
- 16) (iii)
- 17) (iii)