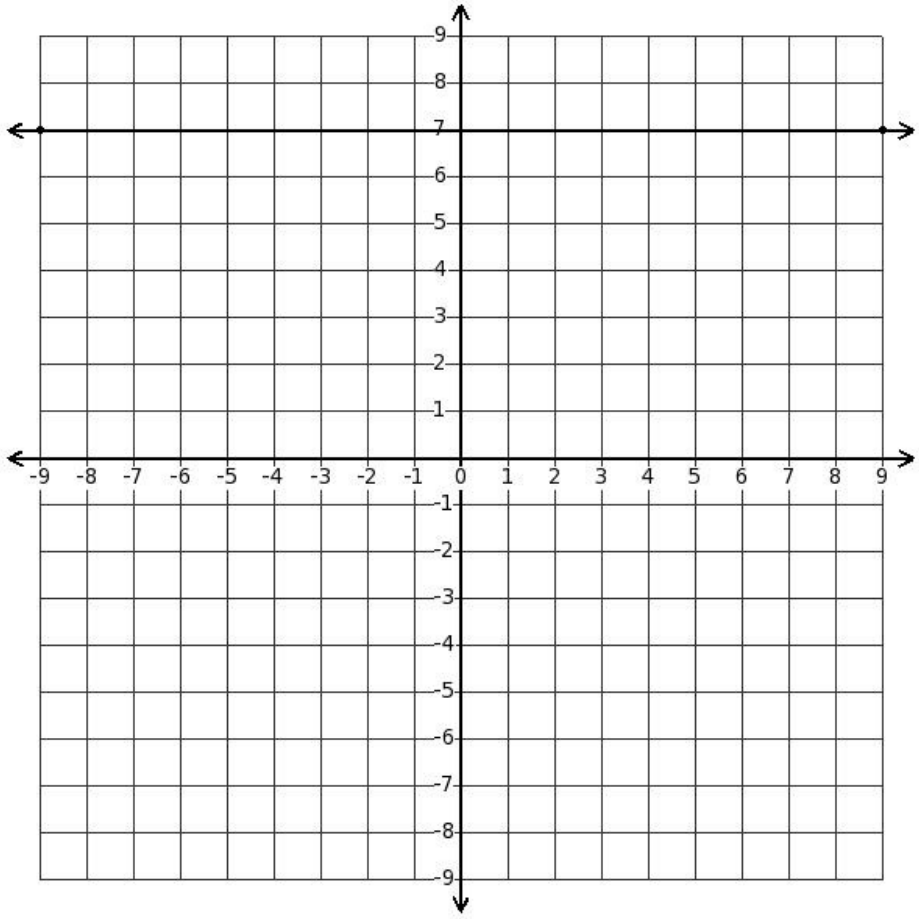
EduSahara™ Assignment

Name : Graphs of Linear Equations

Chapter : Co-ordinate Geometry

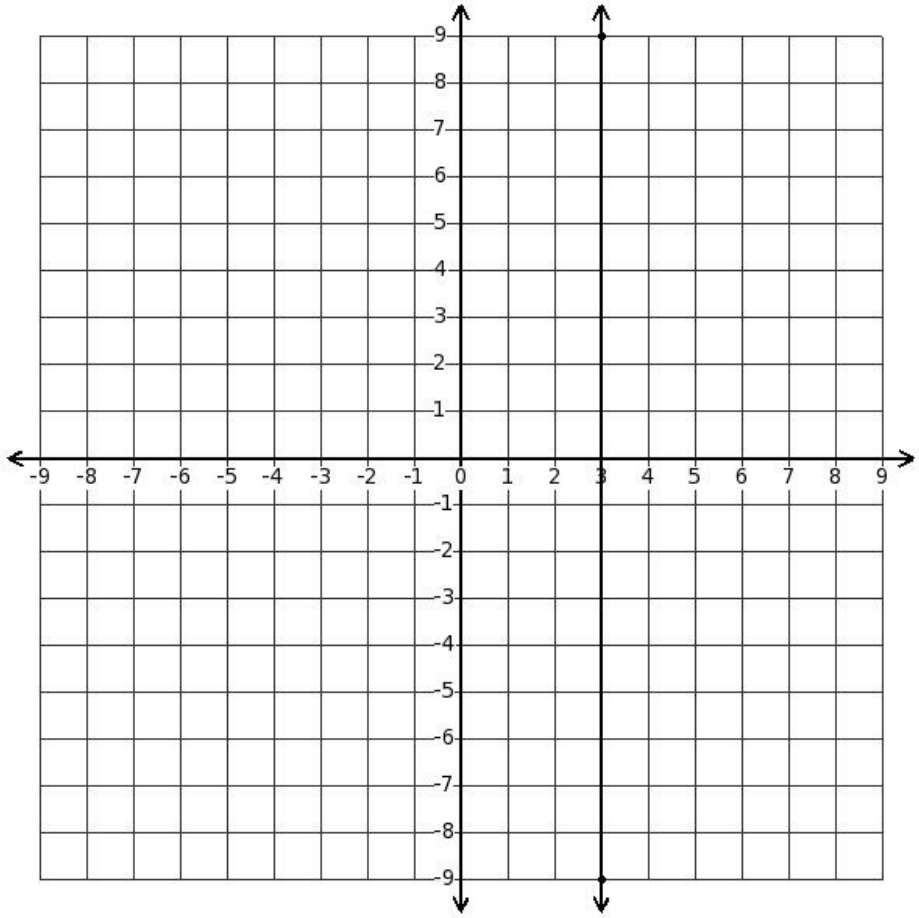
Grade : ICSE Grade IX

1. Find the equation of the displayed line



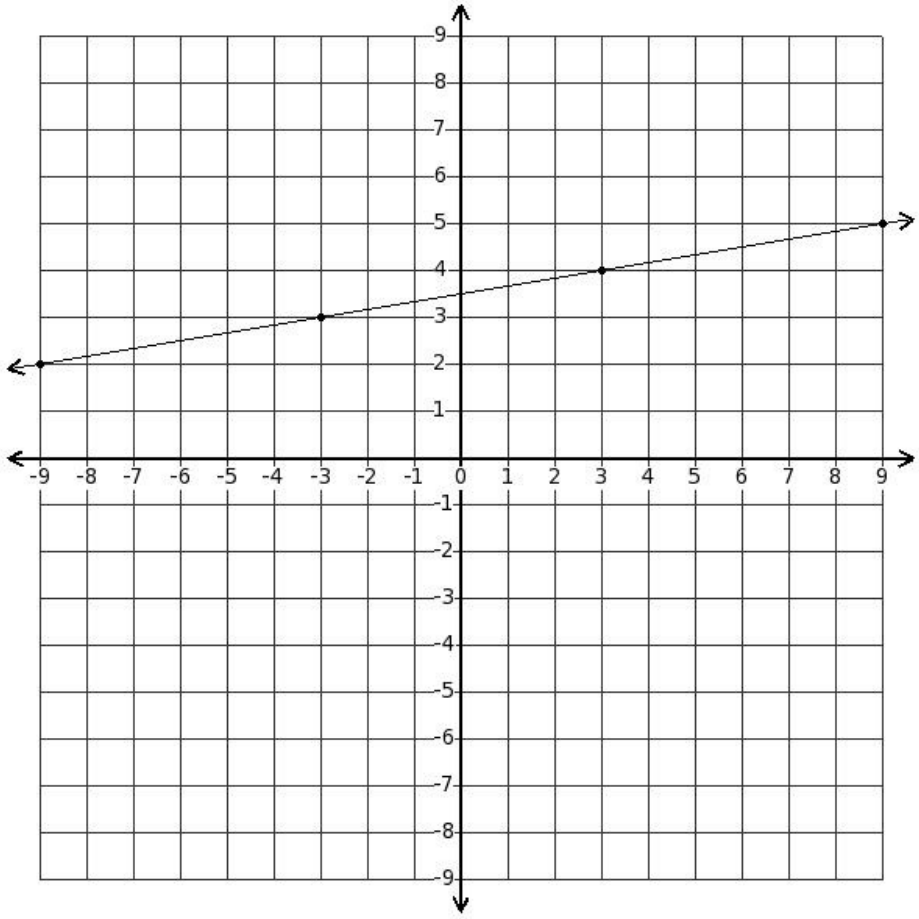
(i) $3y=7$ (ii) $x=7$ (iii) $y=8$ (iv) $y=6$ (v) $y=7$

2. Find the equation of the displayed line



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

3. Find the equation of the line passing through the points $((-3),3)$ and $(3,4)$



(i) $(-6y+21)=0$ (ii) $(x-6y+21)=0$ (iii) $(-x+6y-27)=0$ (iv) $(2x-6y+21)=0$ (v) $(-x+6y-20)=0$

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

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

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

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

6. The equation of the line passing through the points $(6, 8)$ and $(5, 0)$ is

(i) $(-8x + y + 40) = 0$ (ii) $(-8x + 2y + 40) = 0$ (iii) $(9x - 2y - 43) = 0$ (iv) $(-16x + 3y + 72) = 0$

7. The equation of x-axis is

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

8. The equation of y-axis is

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

9. Any line parallel to x-axis is

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

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

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

11. Which of the following are true?

a) Equation of the line passing through origin is y = mx + 8
b) Equation of the line passing through origin is $y = mx + c$
c) Equation of the line passing through origin is $y = mx$
d) Equation of the line passing through origin is y = x

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

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

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

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

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

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

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

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

a) $x = cy + m$
b) $y = mx + c$
c) $x = my + c$
d) $y = cx + m$

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

16. The equation of the x-axis is

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

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

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

(i) $(9x-5y-67)=0$ (ii) $(-3x-11y-79)=0$ (iii) $(7x+10y-66)=0$ (iv) $(x-8y)=0$

(v) $(-13x+6y-74)=0$

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

(i) $(-3x+8y)=0$ (ii) $(3x-6y)=0$ (iii) $(-x+6y+10)=0$ (iv) $(-4x-y)=0$ (v) $(x+6y)=0$

19. Find the set of points satisfying the equation $(-12x+y+43)=0$

(i) $((-2),(-67)),((-1),(-55)),(0,(-43)),(1,(-31)),(4,(-17))$

(ii) $((-2),(-67)),((-1),(-55)),(0,(-43)),(0,(-30)),(2,(-19))$

(iii) $((-2),(-67)),((-1),(-55)),(1,(-44)),(1,(-31)),(2,(-19))$

(iv) $((-2),(-67)),((-1),(-55)),(0,(-43)),(1,(-31)),(2,(-19))$

(v) $((-2),(-67)),((-1),(-55)),((-2),(-45)),(1,(-31)),(2,(-19))$

20. Find the set of points satisfying the equation $y=(-\frac{5}{9}x-\frac{11}{9})$

(i) $((-2),(-\frac{1}{9})),((-1),(-\frac{2}{3})),(0,(-\frac{11}{9})),(1,(-\frac{16}{9})),(4,(-\frac{1}{3}))$

(ii) $((-2),(-\frac{1}{9})),((-1),(-\frac{2}{3})),((-2),(-\frac{29}{9})),(1,(-\frac{16}{9})),(2,(-\frac{7}{3}))$

(iii) $((-2),(-\frac{1}{9})),((-1),(-\frac{2}{3})),(0,(-\frac{11}{9})),(0,(-\frac{7}{9})),(2,(-\frac{7}{3}))$

(iv) $((-2),(-\frac{1}{9})),((-1),(-\frac{2}{3})),(1,(-\frac{20}{9})),(1,(-\frac{16}{9})),(2,(-\frac{7}{3}))$

(v) $((-2),(-\frac{1}{9})),((-1),(-\frac{2}{3})),(0,(-\frac{11}{9})),(1,(-\frac{16}{9})),(2,(-\frac{7}{3}))$

21. Find the set of points satisfying the equation $x=(\frac{11}{9}y+\frac{16}{3})$

(i) $((-2),(-6)),((-1),(-\frac{57}{11})),(0,(-\frac{48}{11})),(0,(-\frac{28}{11})),(2,(-\frac{30}{11}))$

(ii) $((-2),(-6)),((-1),(-\frac{57}{11})),((-2),(-\frac{70}{11})),(1,(-\frac{39}{11})),(2,(-\frac{30}{11}))$

(iii) $((-2),(-6)),((-1),(-\frac{57}{11})),(1,(-\frac{59}{11})),(1,(-\frac{39}{11})),(2,(-\frac{30}{11}))$

(iv) $((-2),(-6)),((-1),(-\frac{57}{11})),(0,(-\frac{48}{11})),(1,(-\frac{39}{11})),(4,(-\frac{8}{11}))$

(v) $((-2),(-6)),((-1),(-\frac{57}{11})),(0,(-\frac{48}{11})),(1,(-\frac{39}{11})),(2,(-\frac{30}{11}))$

22. Find the set of points satisfying the equation $y=\frac{11}{10}x$

(i) $((-2),(-\frac{11}{5})),((-1),(-\frac{11}{10})),(0,0),(1,\frac{11}{10}),(2,\frac{11}{5})$

(ii) $((-2),(-\frac{11}{5})),((-1),(-\frac{11}{10})),(0,0),(0,\frac{21}{10}),(2,\frac{11}{5})$

(iii) $((-2),(-\frac{11}{5})),((-1),(-\frac{11}{10})),((-2),(-2)),(1,\frac{11}{10}),(2,\frac{11}{5})$

(iv) $((-2),(-\frac{11}{5})),((-1),(-\frac{11}{10})),(0,0),(1,\frac{11}{10}),(4,\frac{21}{5})$

(v) $((-2),(-\frac{11}{5})),((-1),(-\frac{11}{10})),(1,(-1)),(1,\frac{11}{10}),(2,\frac{11}{5})$

23. Find the set of points satisfying the equation $(8x+7y-2)=0$

(i) $((-2),\frac{18}{7}),((-1),\frac{10}{7}),(0,\frac{2}{7}),(0,\frac{1}{7}),(2,(-2))$

(ii) $((-2),\frac{18}{7}),((-1),\frac{10}{7}),((-2),(-\frac{12}{7})),(1,(-\frac{6}{7})),(2,(-2))$

(iii) $((-2),\frac{18}{7}),((-1),\frac{10}{7}),(1,(-\frac{5}{7})),(1,(-\frac{6}{7})),(2,(-2))$ (iv) $((-2),\frac{18}{7}),((-1),\frac{10}{7}),(0,\frac{2}{7}),(1,(-\frac{6}{7})),(4,0)$

(v) $((-2),\frac{18}{7}),((-1),\frac{10}{7}),(0,\frac{2}{7}),(1,(-\frac{6}{7})),(2,(-2))$

24. Find the set of points satisfying the equation $y=9$

(i) $((-2),9),((-1),9),(0,9),(1,9),(2,9)$ (ii) $((-2),9),((-1),9),(0,9),(1,9),(4,11)$

(iii) $((-2),9),((-1),9),(0,9),(0,10),(2,9)$ (iv) $((-2),9),((-1),9),((-2),7),(1,9),(2,9)$

(v) $((-2),9),((-1),9),(1,8),(1,9),(2,9)$

25. Find the set of points satisfying the equation $x=7$

(i) $(7,(-2)),(7,(-1)),(7,0),(7,1),(7,2)$ (ii) $(7,(-2)),(7,(-1)),(7,0),(6,2),(7,2)$

(iii) $(7,(-2)),(7,(-1)),(8,(-1)),(7,1),(7,2)$ (iv) $(7,(-2)),(7,(-1)),(7,0),(7,1),(9,4)$

(v) $(7,(-2)),(7,(-1)),(5,(-2)),(7,1),(7,2)$

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26. Which of the following equations satisfy the given points $((-2),\frac{16}{3}),((-1),\frac{53}{12}),(0,\frac{7}{2}),(1,\frac{31}{12}),(2,\frac{5}{3})$?

(i) $y=3$ (ii) $y=(-\frac{11}{12}x+\frac{17}{2})$ (iii) $x=(\frac{11}{12}y+\frac{13}{4})$ (iv) $x=6$ (v) $(-11x-12y+42)=0$

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27. Which of the following equations satisfy the given points $((-2),\frac{17}{2}),((-1),\frac{33}{4}),(0,8),(1,\frac{31}{4}),(2,\frac{15}{2})$?

(i) $x=4$ (ii) $(9x+15y-5)=0$ (iii) $x=(\frac{1}{4}y+\frac{9}{4})$ (iv) $(-4x-16y+16)=0$ (v) $y=(-\frac{1}{4}x+8)$

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28. Which of the following equations satisfy the given points $((-2),2),((-1),\frac{13}{10}),(0,\frac{3}{5}),(1,(-\frac{1}{10})),(2,(-\frac{4}{5}))$?

(i) $x=8$ (ii) $x=(\frac{1}{3}y+7)$ (iii) $y=3$ (iv) $y=(-\frac{1}{3}x+\frac{17}{3})$ (v) $(7x+10y-6)=0$

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

(i) $x=(\frac{15}{16}y-\frac{155}{16})$ (ii) $y=5$ (iii) $(3x+2y-1)=0$ (iv) $y=(-\frac{15}{16}x+\frac{5}{16})$ (v) $x=(-5)$

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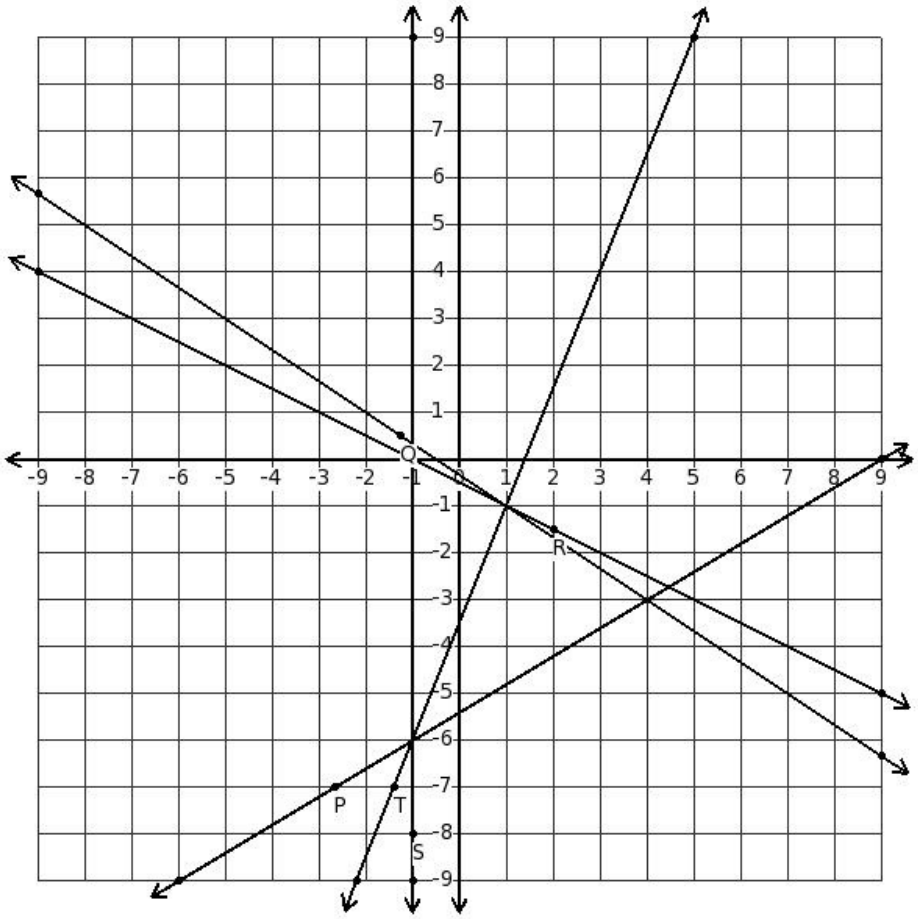
30. Which of the following equations satisfy the given points $(3,(-2)),(3,(-1)),(3,0),(3,1),(3,2)$?

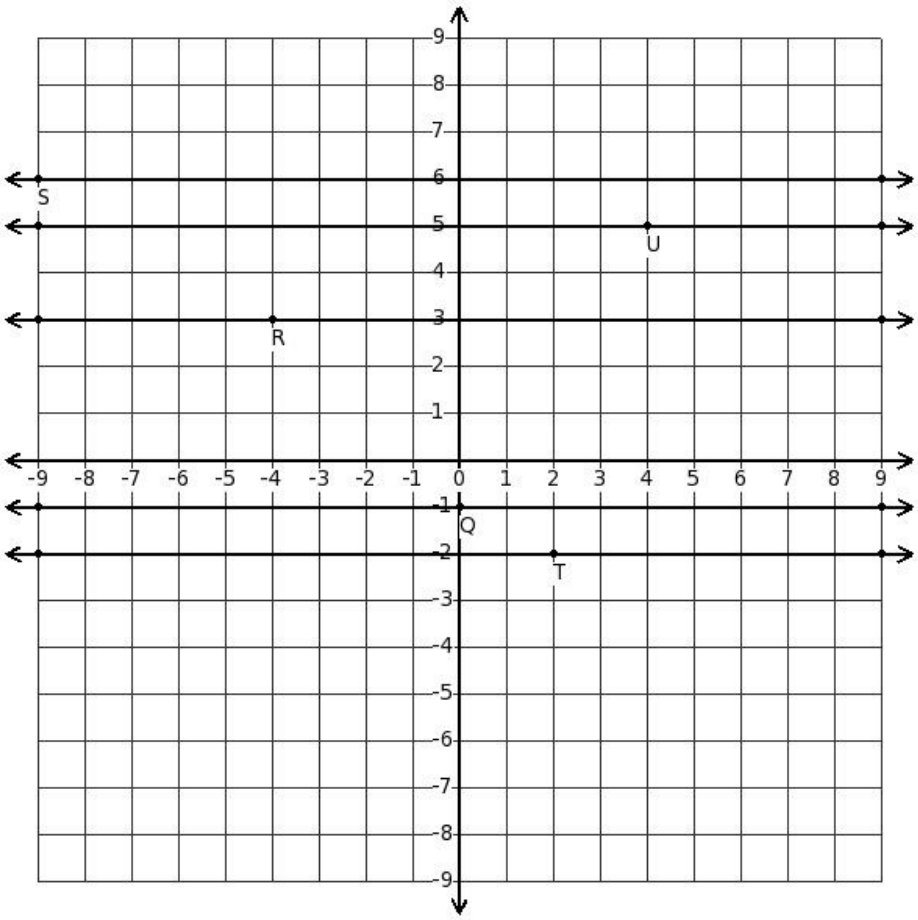
(i) $(2x+8y-1)=0$ (ii) $y=1$ (iii) $y=(-x+4)$ (iv) $x=3$ (v) $(-8x-8y+24)=0$

31. Which of the displayed lines represent the equation $(3x-5y-27)=0$?



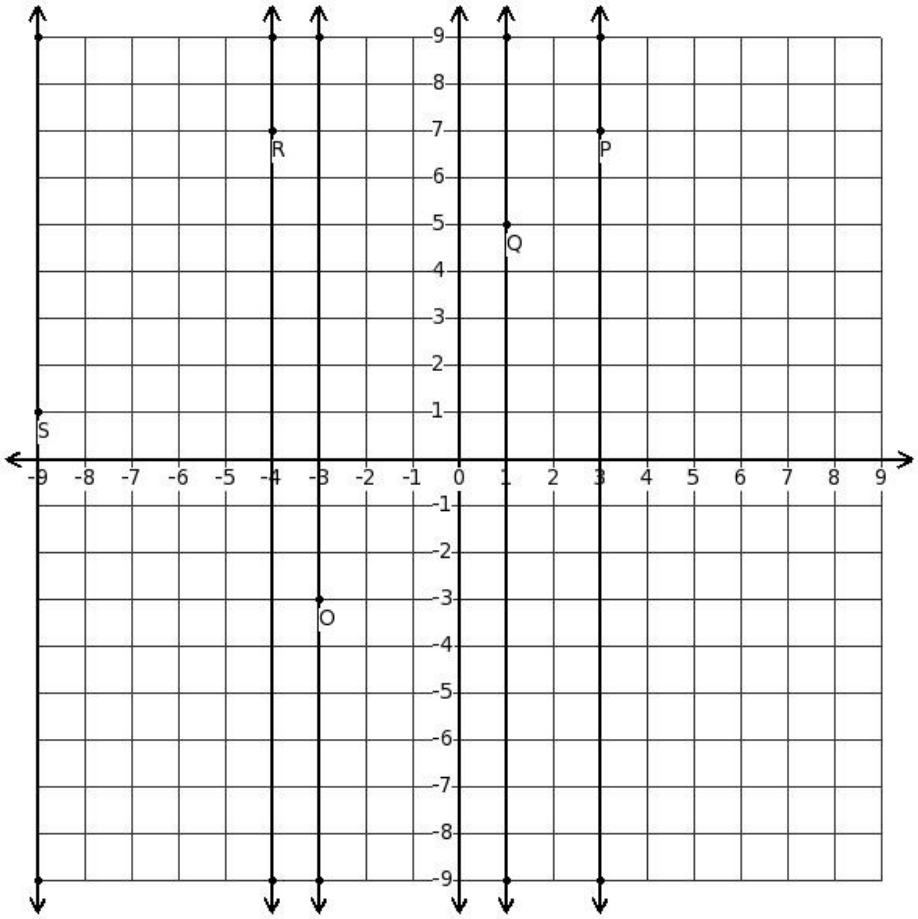
(i) line with point R (ii) line with point P (iii) line with point Q (iv) line with point S (v) line with point T

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



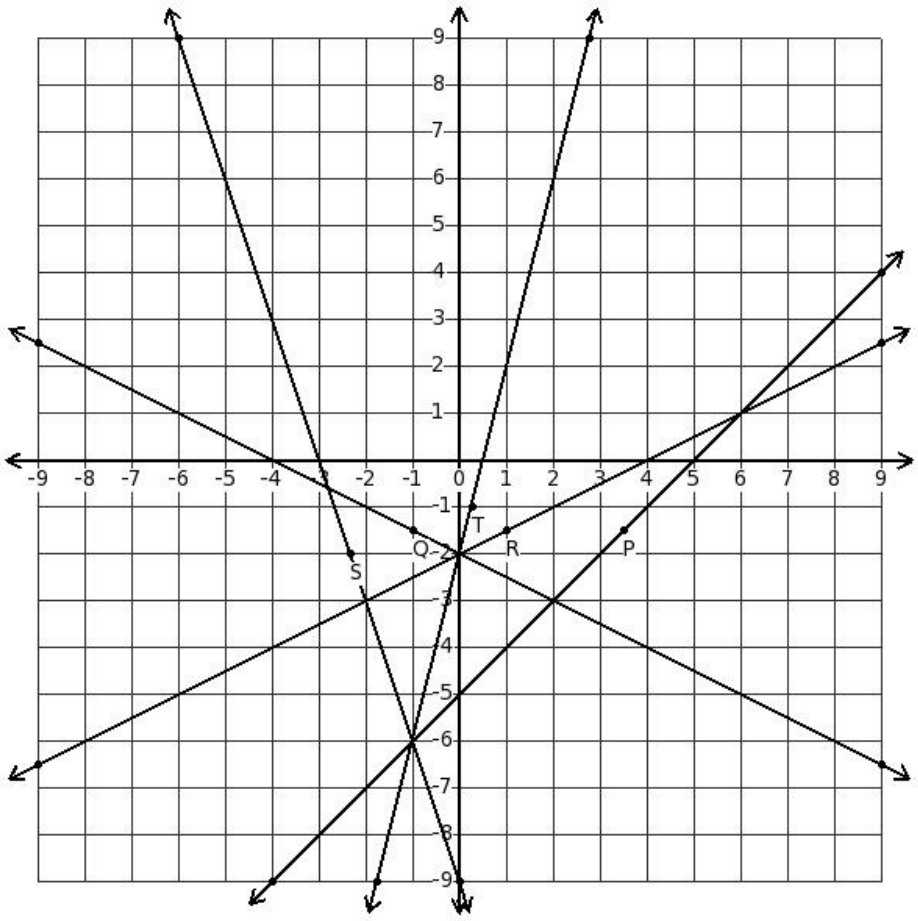
(i) line with point R (ii) line with point S (iii) line with point Q (iv) line with point T (v) line with point U

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



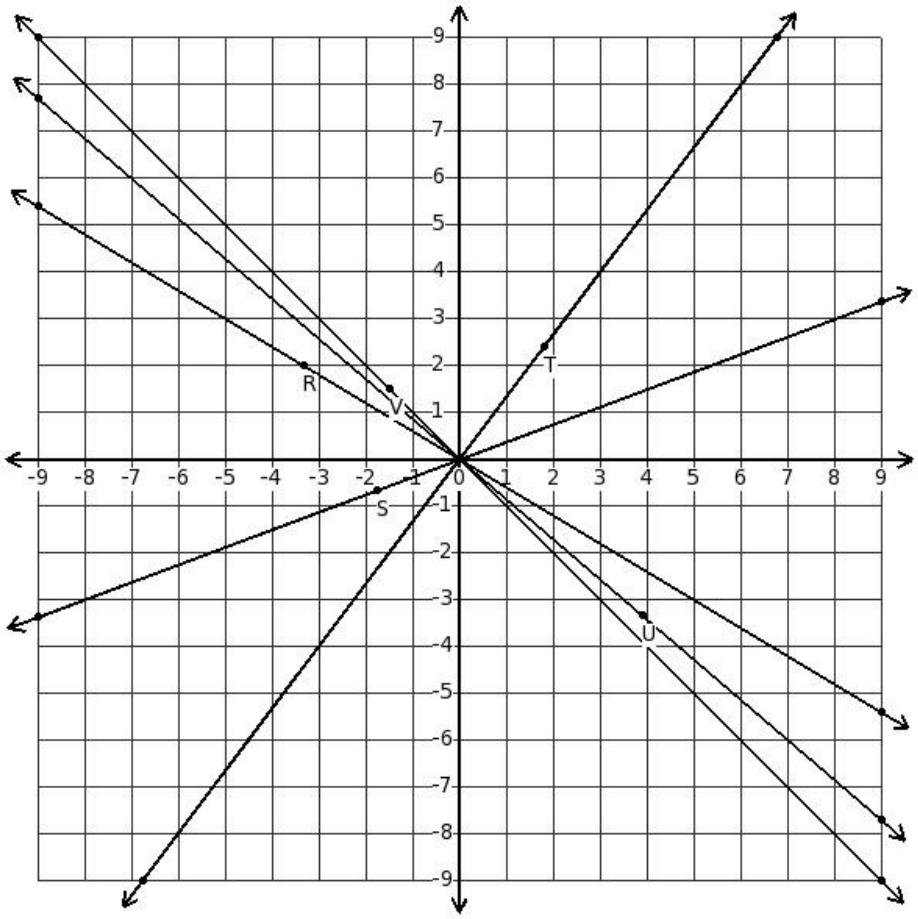
(i) line with point Q (ii) line with point P (iii) line with point S (iv) line with point R (v) line with point O

34. Which of the displayed lines represent the equation $y=(x-5)$



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

35. Which of the displayed lines represent the equation $y=(-\frac{3}{5}x)$



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

Assignment Key

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