EduSahara™ Learning Center Assignment

Grade : Class IX, SSC
Chapter : Linear Equation in Two variables
Name : Line Equations & Satisfying Points

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1. The equation of the line passing through the points $(5, 2)$ and $((-8), 4)$ is

(i) $(2x + 13y - 36) = 0$

(ii) $(-8x + 3y + 34) = 0$

(iii) $(-10x - 10y - 40) = 0$

(iv) $(12x - 2y - 36) = 0$

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2. The equation of x-axis is

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

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3. The equation of y-axis is

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

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4. Any line parallel to x-axis is

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

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5. Any line parallel to y-axis is

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

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

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

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7. Which of the following are true?

a) Equation of the line passing through origin is y = mx + 7

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

c) Equation of the line passing through origin is y = x

d) Equation of the line passing through origin is $y = mx$

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

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8. Which of the following are true?

a) The abscissa of every point on y-axis is zero
b) The ordinate of every point on x-axis is zero
c) The ordinate of every point on y-axis is zero
d) The abscissa of every point on x-axis is zero

(i) (ii) (iii) (iv) (v)

{a,b} {c,d,a} {d,b} {c,b,a} {c,a}

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9. Which of the following are true?

a) A vertical line other than y-axis has no x-intercept
b) A vertical line other than y-axis has no y-intercept
c) A horizontal line other than x-axis has no y-intercept
d) A horizontal line other than x-axis has no x-intercept

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

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

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

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

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

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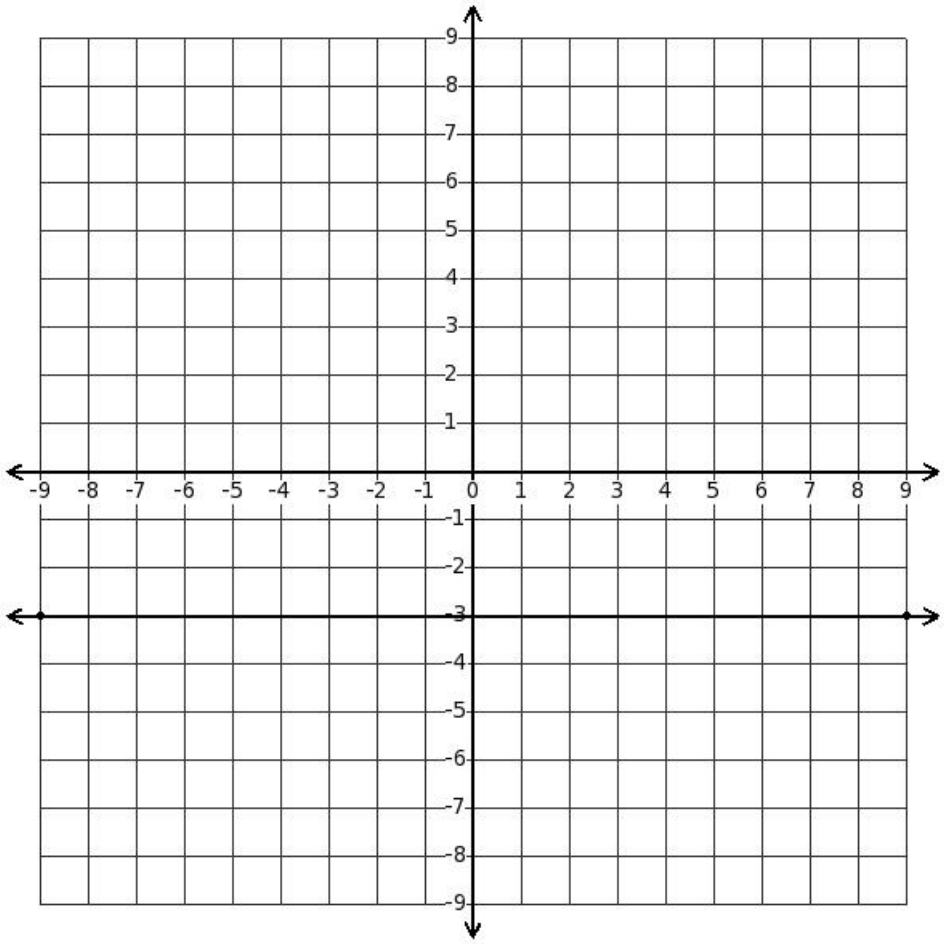
12. Find the equation of the displayed line



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

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

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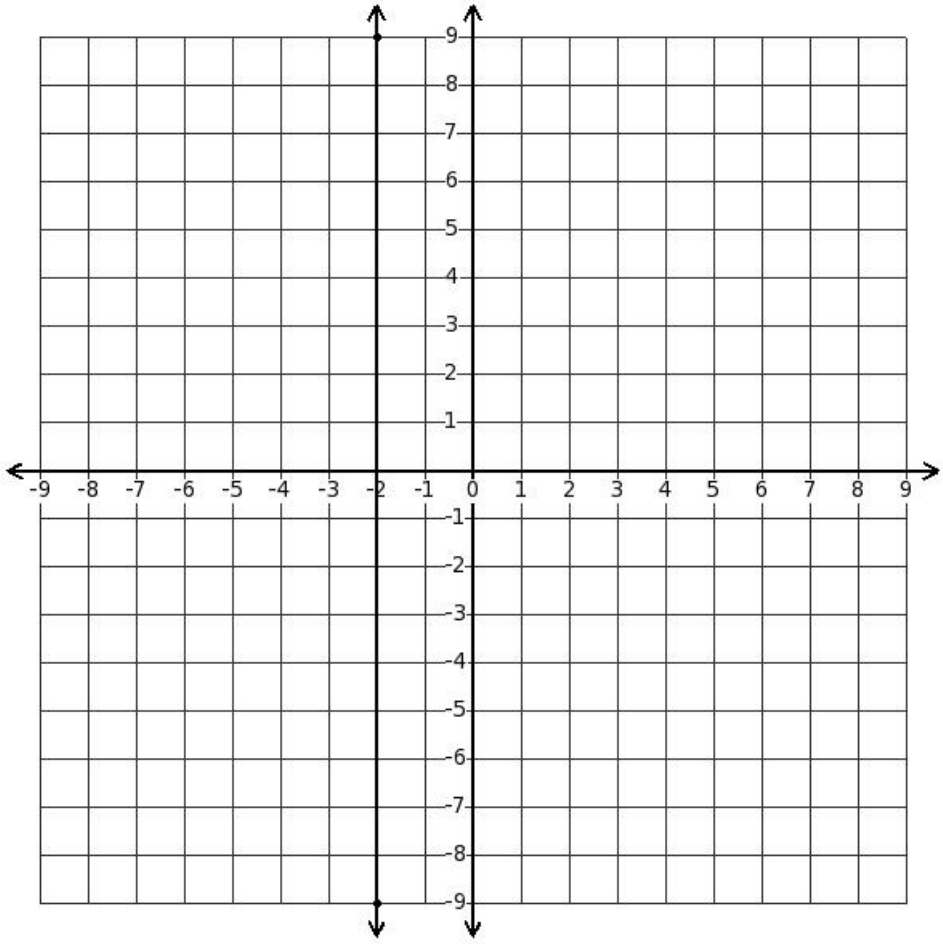
13. Find the equation of the displayed line



(i) $x = (-3)$ (ii) $x = (-1)$ (iii) $x = (-2)$

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

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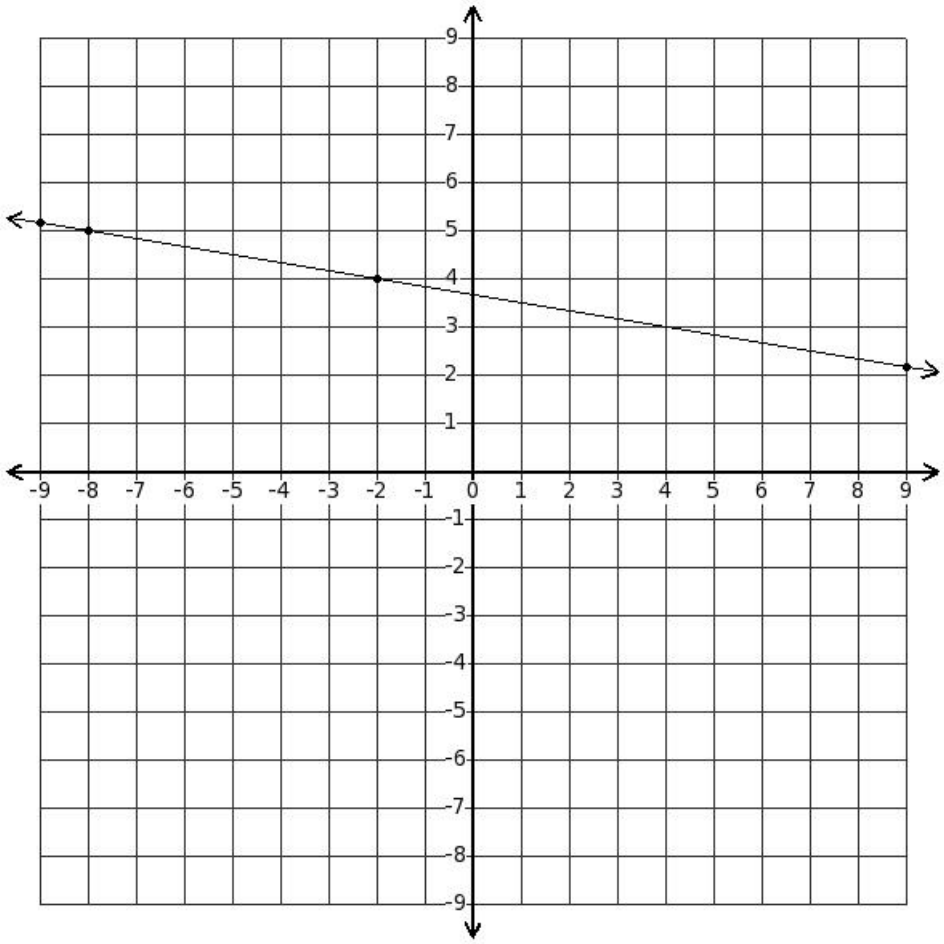
14. Find the equation of the line passing through the points $((-2), 4)$ and $((-8), 5)$



(i) $(x + 6y - 22) = 0$

(ii) $(x + 6y - 28) = 0$

(iii) $(x + 6y - 23) = 0$

(iv) $(2x + 6y - 22) = 0$

(v) $(6y - 22) = 0$

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15. The equation of the x-axis is

a) $x = 0$

b) $x = 1$

c) $y = 0$

d) $x = y$

e) $y = 1$

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

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16. Find the set of points satisfying the equation $(-12x + 3y + 66) = 0$

(i) $((-2),(-30)),((-1),(-26)),((-2),(-24)),(1,(-18)),(2,(-14))$

(ii) $((-2),(-30)),((-1),(-26)),(1,(-23)),(1,(-18)),(2,(-14))$

(iii) $((-2),(-30)),((-1),(-26)),(0,(-22)),(1,(-18)),(2,(-14))$

(iv) $((-2),(-30)),((-1),(-26)),(0,(-22)),(1,(-18)),(4,(-12))$

(v) $((-2),(-30)),((-1),(-26)),(0,(-22)),(0,(-17)),(2,(-14))$

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17. Find the set of points satisfying the equation $y = (3x - 18)$

(i) $((-2),(-24)),((-1),(-21)),(1,(-19)),(1,(-15)),(2,(-12))$

(ii) $((-2),(-24)),((-1),(-21)),(0,(-18)),(1,(-15)),(4,(-10))$

(iii) $((-2),(-24)),((-1),(-21)),((-2),(-20)),(1,(-15)),(2,(-12))$

(iv) $((-2),(-24)),((-1),(-21)),(0,(-18)),(0,(-14)),(2,(-12))$

(v) $((-2),(-24)),((-1),(-21)),(0,(-18)),(1,(-15)),(2,(-12))$

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18. Find the set of points satisfying the equation $x = (\frac{1}{6}y - 3)$

(i) $((-2),6),((-1),12),(1,17),(1,24),(2,30)$

(ii) $((-2),6),((-1),12),(0,18),(0,25),(2,30)$

(iii) $((-2),6),((-1),12),((-2),16),(1,24),(2,30)$

(iv) $((-2),6),((-1),12),(0,18),(1,24),(2,30)$

(v) $((-2),6),((-1),12),(0,18),(1,24),(4,32)$

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19. Find the set of points satisfying the equation $y = (-10x)$

(i) $((-2),20),((-1),10),(1,(-1)),(1,(-10)),(2,(-20))$

(ii) $((-2),20),((-1),10),((-2),(-2)),(1,(-10)),(2,(-20))$

(iii) $((-2),20),((-1),10),(0,0),(1,(-10)),(4,(-18))$

(iv) $((-2),20),((-1),10),(0,0),(1,(-10)),(2,(-20))$

(v) $((-2),20),((-1),10),(0,0),(0,(-9)),(2,(-20))$

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20. Find the set of points satisfying the equation $(4x + 15y - 3) = 0$

(i) $((-2),\frac{11}{15}),((-1),\frac{7}{15}),((-2),(-\frac{9}{5})),(1,(-\frac{1}{15})),(2,(-\frac{1}{3}))$

(ii) $((-2),\frac{11}{15}),((-1),\frac{7}{15}),(0,\frac{1}{5}),(1,(-\frac{1}{15})),(4,\frac{5}{3})$

(iii) $((-2),\frac{11}{15}),((-1),\frac{7}{15}),(1,(-\frac{4}{5})),(1,(-\frac{1}{15})),(2,(-\frac{1}{3}))$

(iv) $((-2),\frac{11}{15}),((-1),\frac{7}{15}),(0,\frac{1}{5}),(0,\frac{14}{15}),(2,(-\frac{1}{3}))$

(v) $((-2), \frac{11}{15}), ((-1), \frac{7}{15}), (0, \frac{1}{5}), (1, (-\frac{1}{15})), (2, (-\frac{1}{3}))$

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21. Find the set of points satisfying the equation $y = 8$

(i) $((-2), 8), ((-1), 8), (0, 8), (1, 8), (2, 8)$

(ii) $((-2), 8), ((-1), 8), ((-2), 6), (1, 8), (2, 8)$

(iii) $((-2), 8), ((-1), 8), (0, 8), (1, 8), (4, 10)$

(iv) $((-2), 8), ((-1), 8), (0, 8), (0, 9), (2, 8)$

(v) $((-2), 8), ((-1), 8), (1, 7), (1, 8), (2, 8)$

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22. Find the set of points satisfying the equation $x = 3$

(i) $(3, (-2)), (3, (-1)), (3, 0), (3, 1), (3, 2)$

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

(iii) $(3, (-2)), (3, (-1)), (3, 0), (2, 2), (3, 2)$

(iv) $(3, (-2)), (3, (-1)), (3, 0), (3, 1), (5, 4)$

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

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23. Which of the following equations satisfy the given points
$((-2), \frac{9}{8}), ((-1), \frac{5}{16}), (0, (-\frac{1}{2})), (1, (-\frac{21}{16})), (2, (-\frac{17}{8}))$?

(i) $y = (-\frac{13}{16}x - \frac{55}{8})$

(ii) $(5x + 6y - 4) = 0$

(iii) $y = (-2)$

(iv) $(-13x - 16y - 8) = 0$

(v) $x = (\frac{13}{16}y - \frac{35}{8})$

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24. Which of the following equations satisfy the given points
$((-2), (-\frac{3}{11})), ((-1), (-\frac{9}{11})), (0, (-\frac{15}{11})), (1, (-\frac{21}{11})), (2, (-\frac{27}{11}))$?

(i) $x = 3$

(ii) $x = (\frac{6}{11}y + \frac{51}{11})$

(iii) $(-6x - 11y - 10) = 0$

(iv) $y = (-\frac{6}{11}x - \frac{15}{11})$

(v) $y = (-3)$

Which of the following equations satisfy the given points

25. $((-2), \frac{5}{2}), ((-1), \frac{3}{2}), (0, \frac{1}{2}), (1, (-\frac{1}{2})), (2, (-\frac{3}{2}))$?

(i) $y = (-\frac{13}{16} x - \frac{5}{2})$

(ii) $x = (\frac{13}{16} y + \frac{245}{16})$

(iii) $y = (-9)$

(iv) $(2x + 2y - 1) = 0$

(v) $(-13x - 16y - 24) = 0$

Which of the following equations satisfy the given points

26. $((-2), (-2)), ((-1), (-2)), (0, (-2)), (1, (-2)), (2, (-2))$?

(i) $x = (\frac{16}{11} y - \frac{56}{11})$

(ii) $(16x + 21y - 14) = 0$

(iii) $y = (-\frac{16}{11} x - \frac{150}{11})$

(iv) $(-16x - 11y - 19) = 0$

(v) $y = (-2)$

Which of the following equations satisfy the given points

27. $(7, (-2)), (7, (-1)), (7, 0), (7, 1), (7, 2)$?

(i) $x = (\frac{6}{5} y + \frac{89}{5})$

(ii) $x = 7$

(iii) $(-6x - 5y - 2) = 0$

(iv) $y = (-\frac{6}{5} x - \frac{3}{5})$

(v) $y = (-9)$

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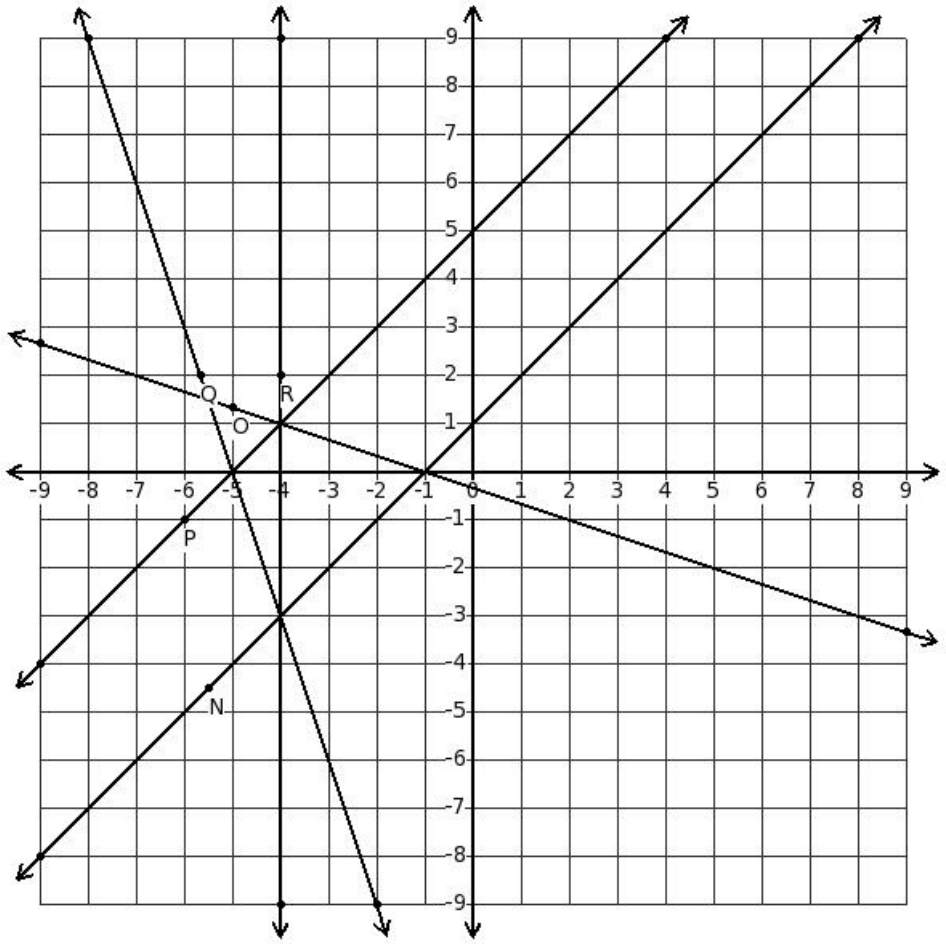
28. Which of the displayed lines represent the equation $(3x - 3y + 3) = 0$?



(i) line with point Q

(ii) line with point R

(iii) line with point P

(iv) line with point N

(v) line with point O

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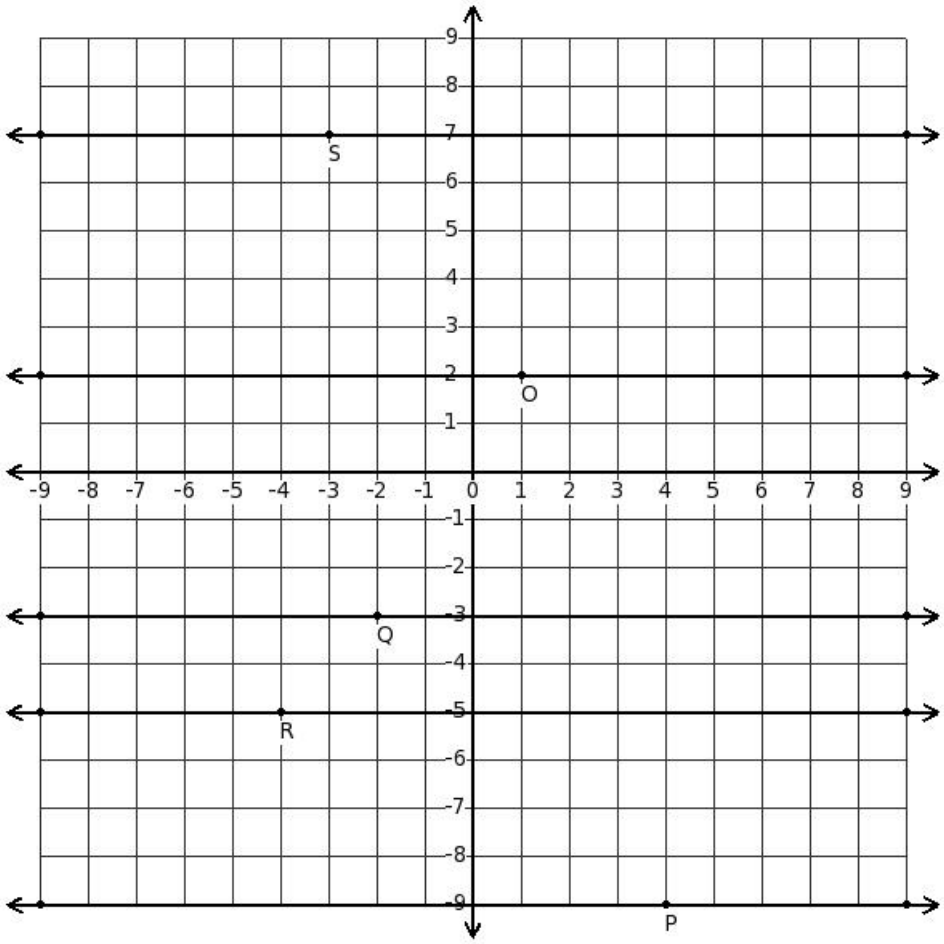
29. Which of the displayed lines represent the equation $y = 2$



(i) line with point R

(ii) line with point P

(iii) line with point O

(iv) line with point Q

(v) line with point S

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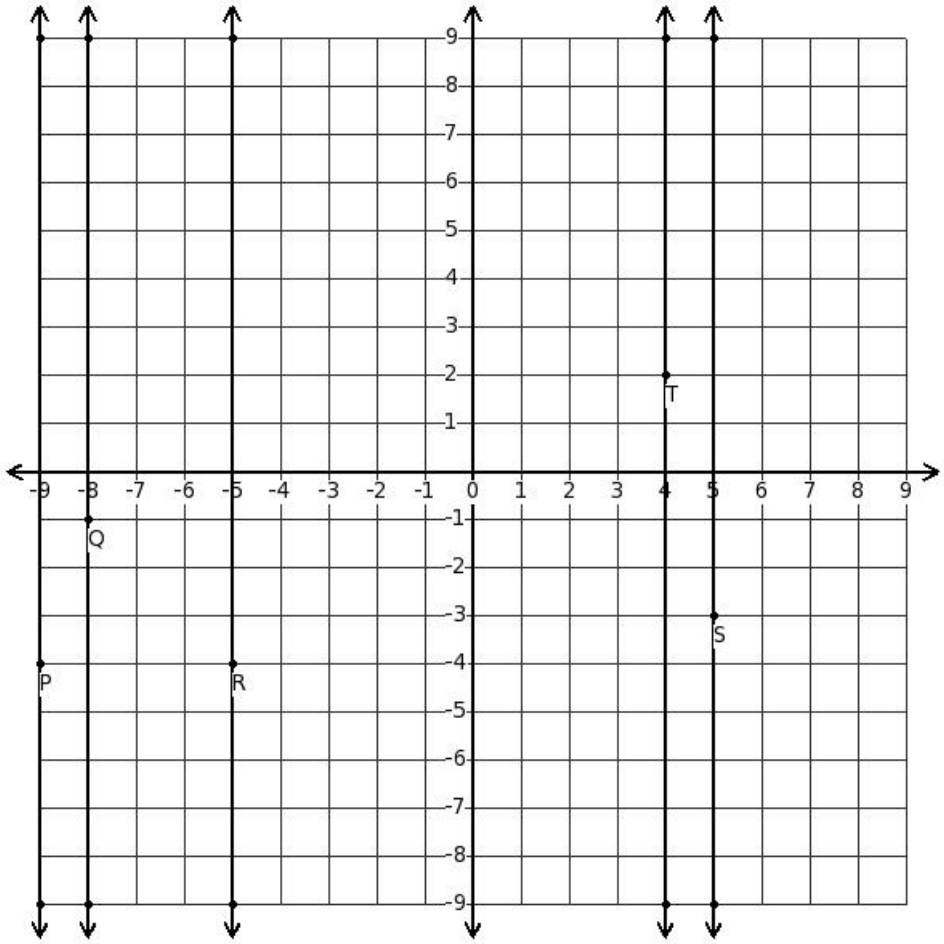
30. Which of the displayed lines represent the equation $x = (-9)$



(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

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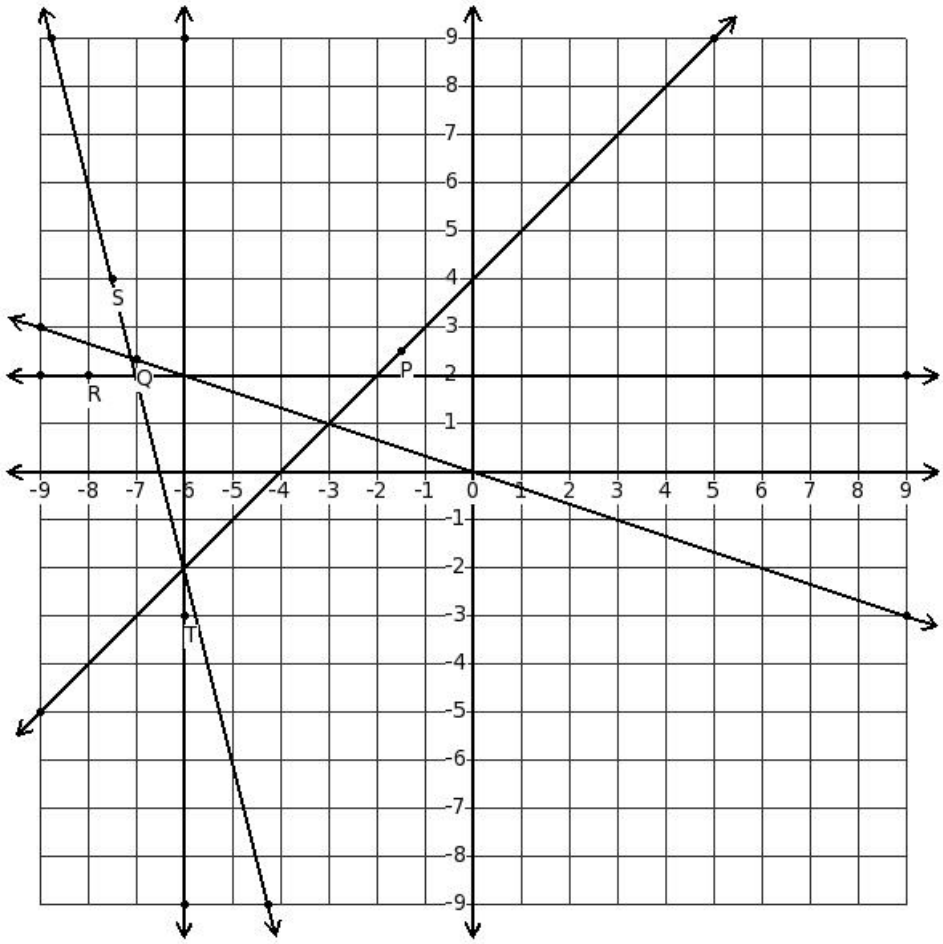
31. Which of the displayed lines represent the equation $y = (x + 4)$



(i) line with point Q

(ii) line with point T

(iii) line with point R

(iv) line with point P

(v) line with point S

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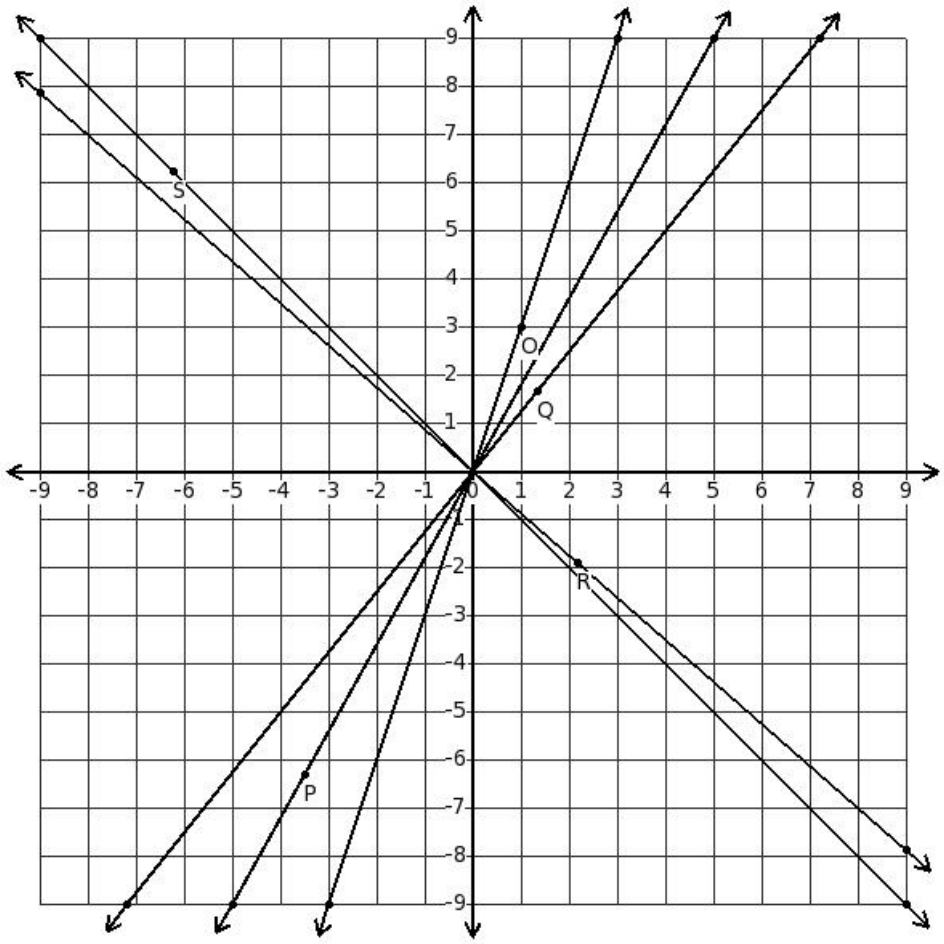
32. Which of the displayed lines represent the equation $y = 3x$



(i) line with point P

(ii) line with point S

(iii) line with point O

(iv) line with point R

(v) line with point Q

Assignment Key

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