EduSahara™ Learning Center Assignment

Grade : Class IX, CBSE
Chapter : Linear Equations in two Variables
Name : Graph of a Linear Equation in Two Variables

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

(i) $x = 0$ (ii) $y = mx$

(iii) $y = mx + c$ (iv) $x = my + c$

(v) $y = 0$

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2. The equation of the line passing through the points $(3, 8)$ and $(8, (-1))$ is

(i) $(-x + 2y + 10) = 0$

(ii) $(-9x - 5y + 67) = 0$

(iii) $(-10x - 3y + 54) = 0$

(iv) $(9x + 2y - 50) = 0$

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3. The equation of x-axis is

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

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4. The equation of y-axis is

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

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5. Any line parallel to x-axis is

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

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6. Any line parallel to y-axis is

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

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7. 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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8. Which of the following are true?

a) Equation of the line passing through origin is y = mx + 5

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

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

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

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

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

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

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

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

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11. Write the given equation $(\ 11x - 8y - 53\ ) = 0$ in $y = mx + c$ form

(i) $y = (\ \frac{11}{8}x - \frac{51}{8}\ )$ (ii) $y = (\ \frac{13}{10}x - \frac{53}{8}\ )$

(iii) $y = (\ \frac{11}{8}x - \frac{53}{8}\ )$ (iv) $y = (\ \frac{3}{2}x - \frac{53}{8}\ )$

(v) $y = (\ \frac{11}{8}x - \frac{55}{8}\ )$

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12. Write the given equation $y = (\ -\frac{3}{4}x + \frac{11}{4}\ )$ in $ax + by + c = 0$ form

(i) $(\ \frac{3}{4}x - y - \frac{11}{4}\ ) = 0$ (ii) $(\ \frac{1}{2}x + y - \frac{11}{4}\ ) = 0$

(iii) $(\ \frac{3}{2}x + y - \frac{11}{4}\ ) = 0$ (iv) $(\ \frac{3}{4}x + 4y - \frac{11}{4}\ ) = 0$

(v) $(\ \frac{3}{4}x + y - \frac{11}{4}\ ) = 0$

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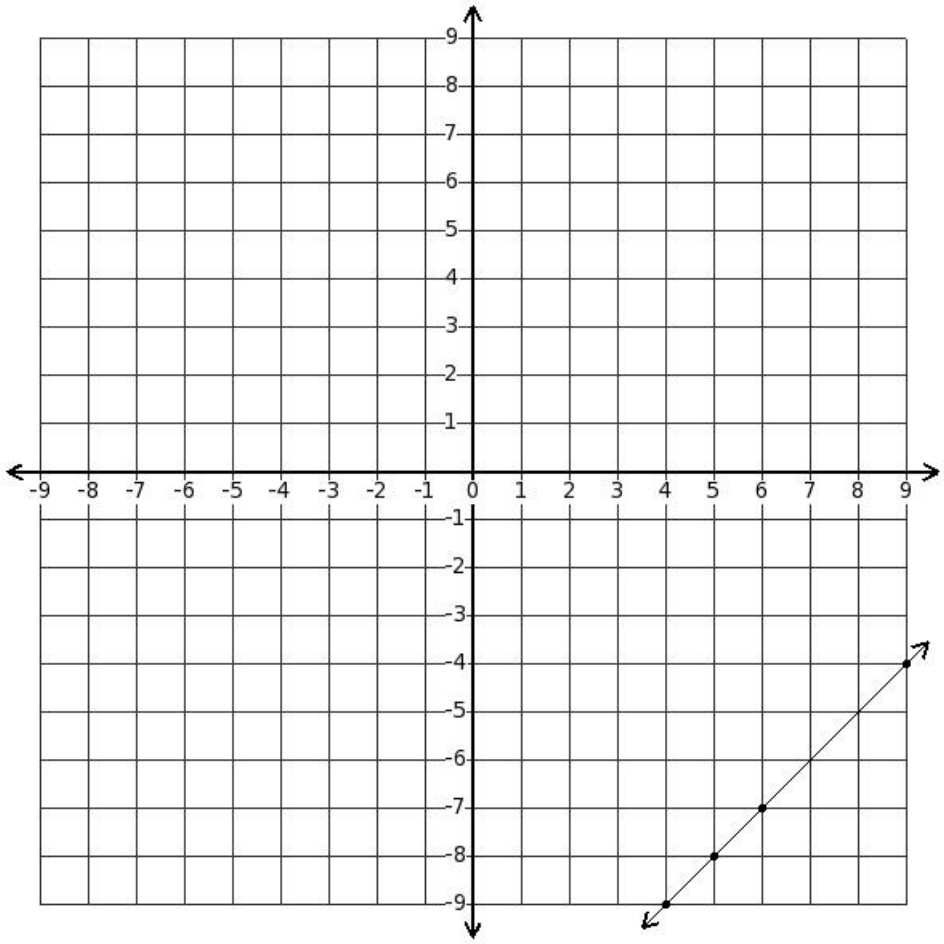
13. Find the equation of the line passing through the points $(\ 5, (-8)\ )$ and $(\ 6, (-7)\ )$



(i) $(-x+y+14)=0$

(ii) $(-y-13)=0$

(iii) $(x-y-13)=0$

(iv) $(2x-y-13)=0$

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

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14. The points B $(2,0)$ and D $((-5),(-1))$ are the opposite vertices of a square ABCD. Find the equation of the diagonal AC

(i) $(6x+y+11)=0$

(ii) $(7x+y+11)=0$

(iii) $(-x+7y+2)=0$

(iv) $(-x+4y+2)=0$

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

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

(i) $(3x-13y-76)=0$

(ii)

$(-5x + 12y - 61) = 0$

(iii) $(8x - 7y) = 0$

(iv) $(-10x - 50) = 0$

(v) $(12x + y - 92) = 0$

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

(i) $(3x + 5y) = 0$

(ii) $(2x + 7y + 34) = 0$

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

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

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

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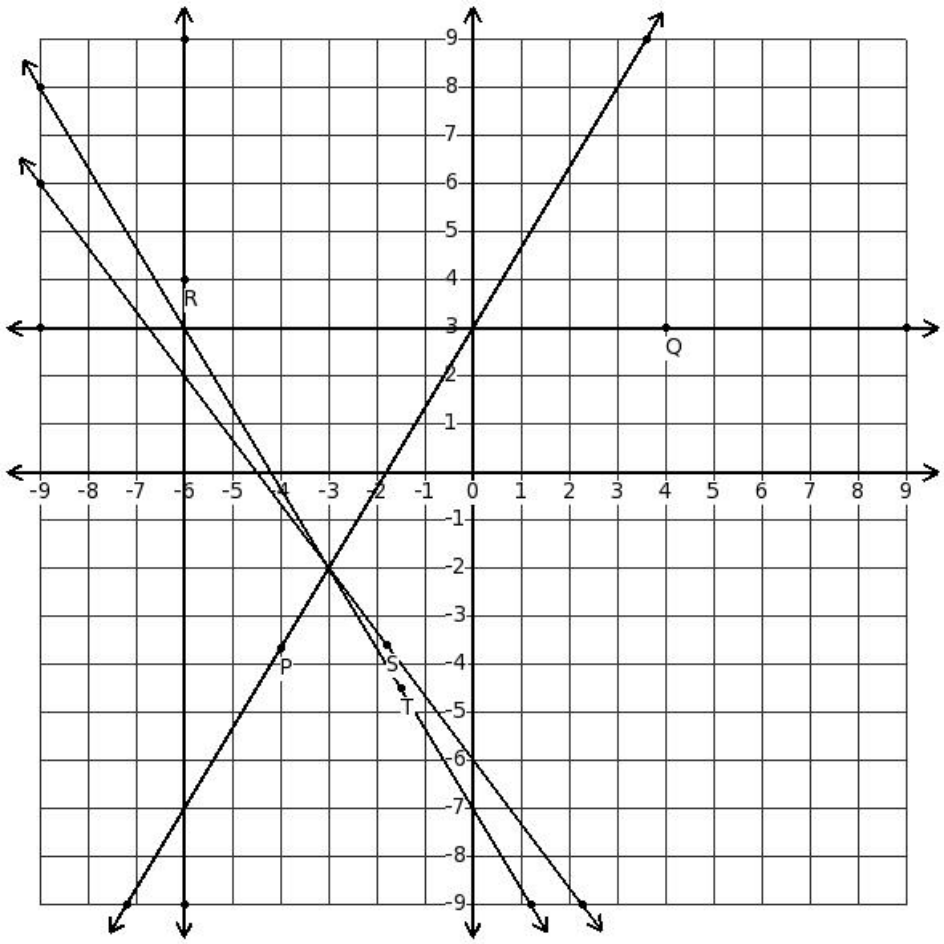
17. Which of the displayed lines represent the equation $(5x - 3y + 9) = 0$?



(i) line with point P

(ii) line with point R

(iii) line with point T

(iv) line with point Q

(v) line with point S

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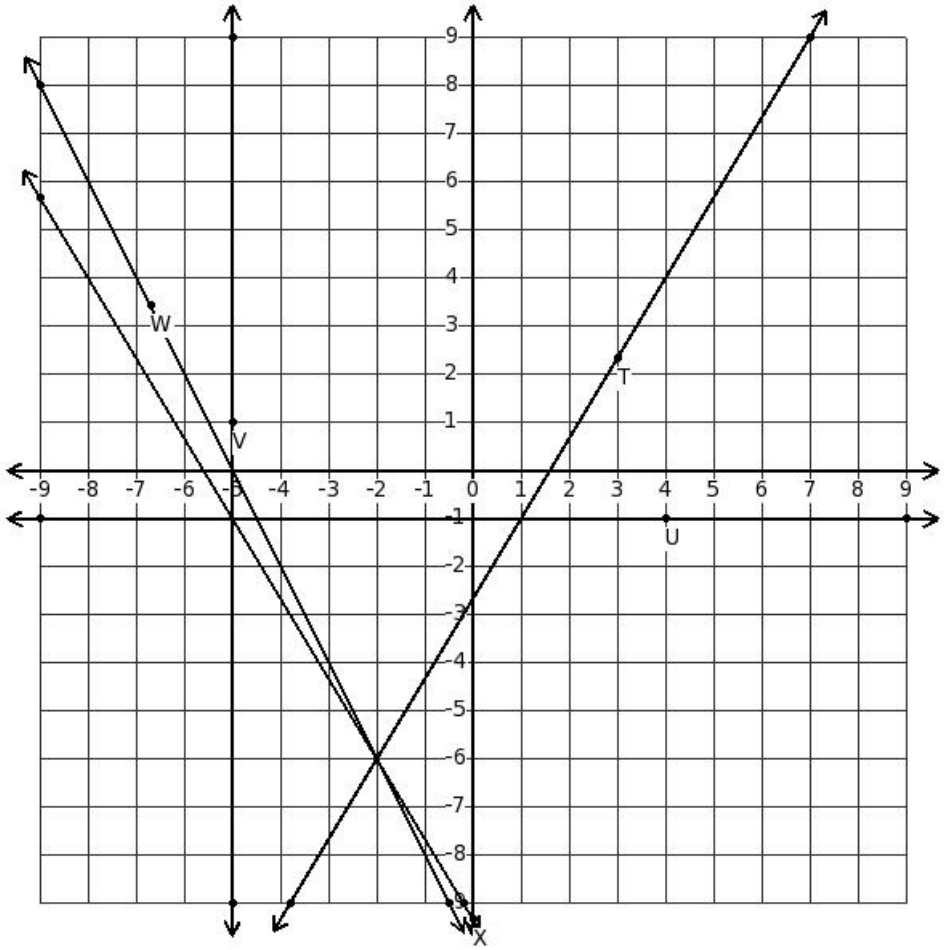
18. Which of the displayed lines represent the equation $y = (\frac{5}{3}x - \frac{8}{3})$



(i) line with point W

(ii) line with point U

(iii) line with point V

(iv) line with point T

(v) line with point X

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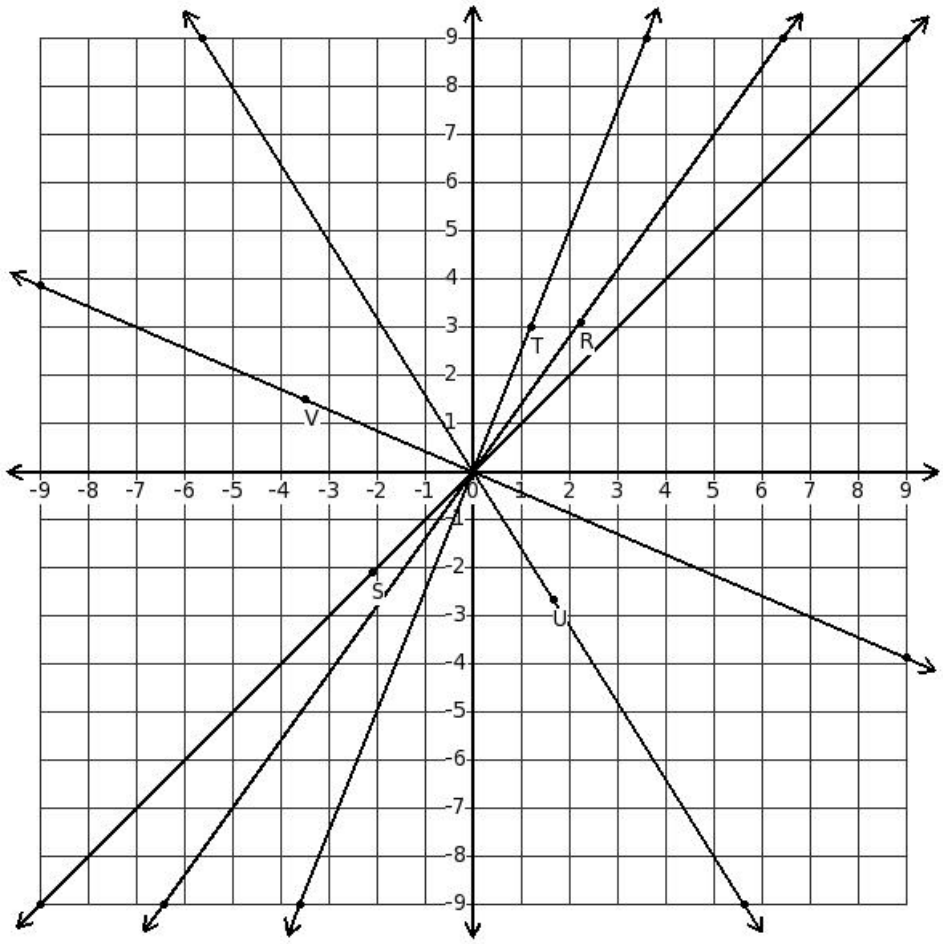
19. Which of the displayed lines represent the equation $y = \frac{7}{5}x$



(i) line with point R

(ii) line with point S

(iii) line with point U

(iv) line with point V

(v) line with point T

Assignment Key

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