EduSahara™ Assignment

Name : Graph of a Linear Equation in Two Variables

Chapter : Linear Equations in two Variables

Grade : CBSE Grade IX

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

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

2. The equation of the line passing through the points $((-6),(-2))$ and $((-8),0)$ is

   (i) $(-7x - 3y - 56) = 0$ (ii) $(-5x - y - 32) = 0$ (iii) $(15x + 3y + 96) = 0$ (iv) $(2x + 2y + 16) = 0$

3. The equation of x-axis is

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

4. The equation of y-axis is

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

5. Any line parallel to x-axis is

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

6. Any line parallel to y-axis is

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

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

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

8. Which of the following are true?

   a) Equation of the line passing through origin is y = x
   b) Equation of the line passing through origin is y = mx + 7
   c) Equation of the line passing through origin is $y = mx + c$
   d) Equation of the line passing through origin is $y = mx$

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

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

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

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

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

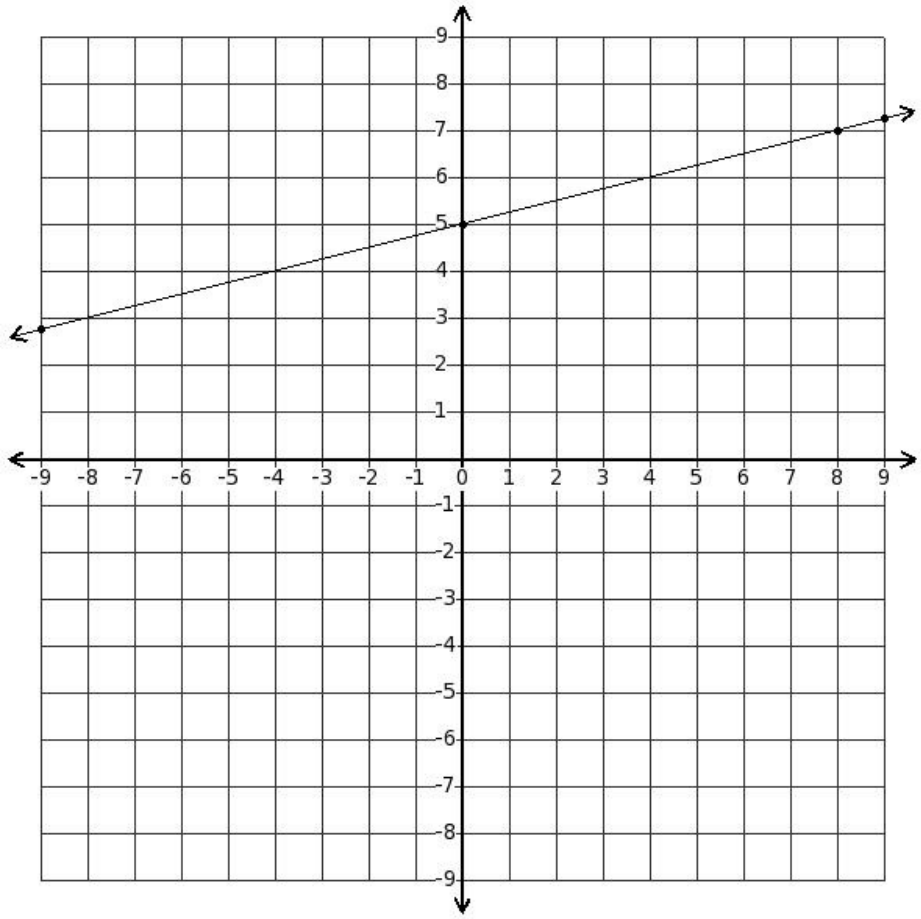
11. Write the given equation $(5x + 9y + 48) = 0$ in $y = mx + c$ form

    (i) $y = (-\frac{5}{9}x - \frac{16}{3})$ (ii) $y = (-\frac{5}{11}x - \frac{16}{3})$ (iii) $y = (-\frac{5}{9}x - \frac{14}{3})$ (iv) $y = (-\frac{5}{7}x - \frac{16}{3})$ (v) $y = (-\frac{5}{9}x - 6)$

12. Write the given equation $y = (-8x + 24)$ in $ax + by + c = 0$ form

    (i) $(9x + y - 24) = 0$ (ii) $(7x + y - 24) = 0$ (iii) $(8x + y - 24) = 0$ (iv) $(8x - 2y - 24) = 0$ (v) $(8x + 4y - 24) = 0$

13. Find the equation of the line passing through the points $(8,7)$ and $(0,5)$



(i) $(-x+4y-24)=0$ (ii) $(-3x+8y-40)=0$ (iii) $(-x+4y-19)=0$ (iv) $(-2x+8y-40)=0$

(v) $(-x+8y-40)=0$

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

(i) $(6y+6)=0$ (ii) $(6x+14)=0$ (iii) $(5x+12)=0$ (iv) $(6y+4)=0$ (v) $(6x+12)=0$

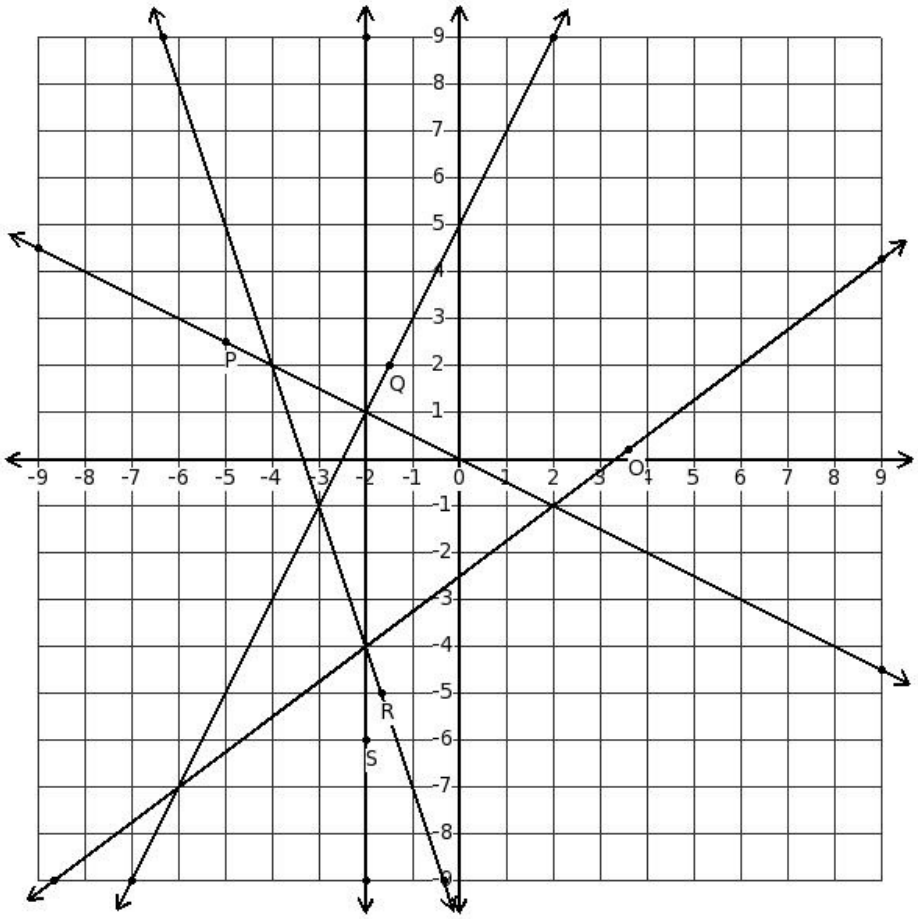
15. Which of the following lines pass through the origin?

(i) $(10x-4y-18)=0$ (ii) $(8x-5y)=0$ (iii) $(5x-5y-15)=0$ (iv) $(7y-56)=0$ (v) $(-15x+2y-46)=0$

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

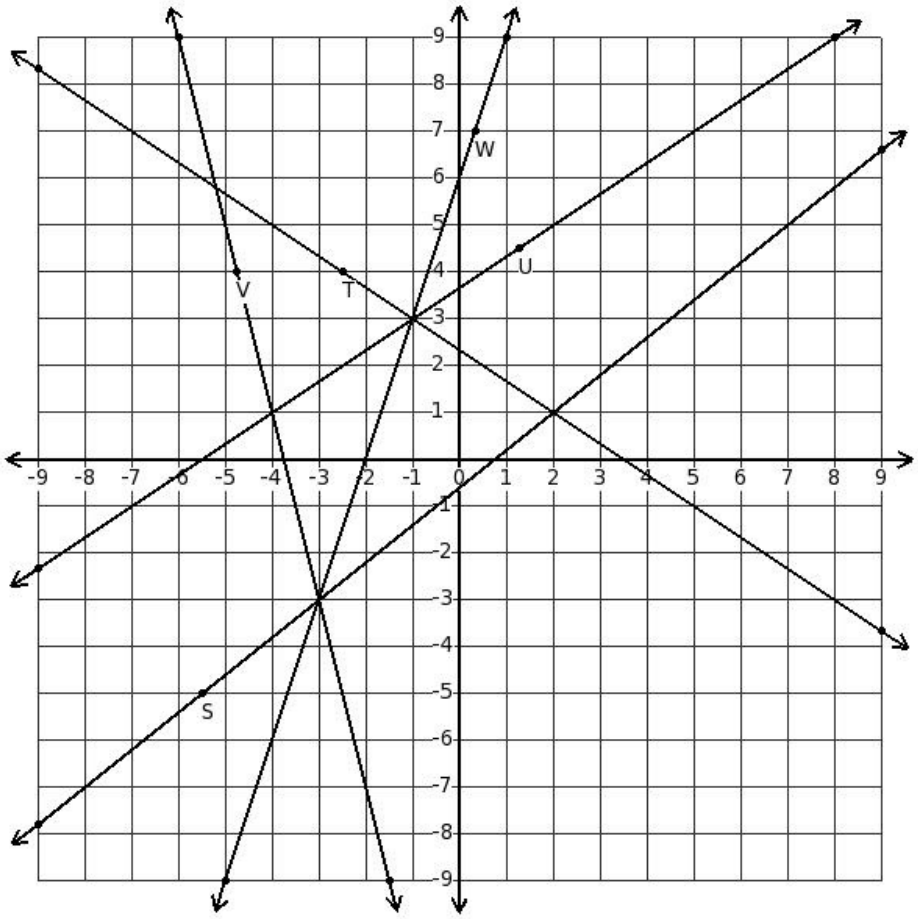
(i) $(3x-y)=0$ (ii) $(-8x-7y)=0$ (iii) $(-x+4y+14)=0$ (iv) $(-4x+2y)=0$ (v) $(x+7y)=0$

17. Which of the displayed lines represent the equation $(3x-4y-10)=0$ ?



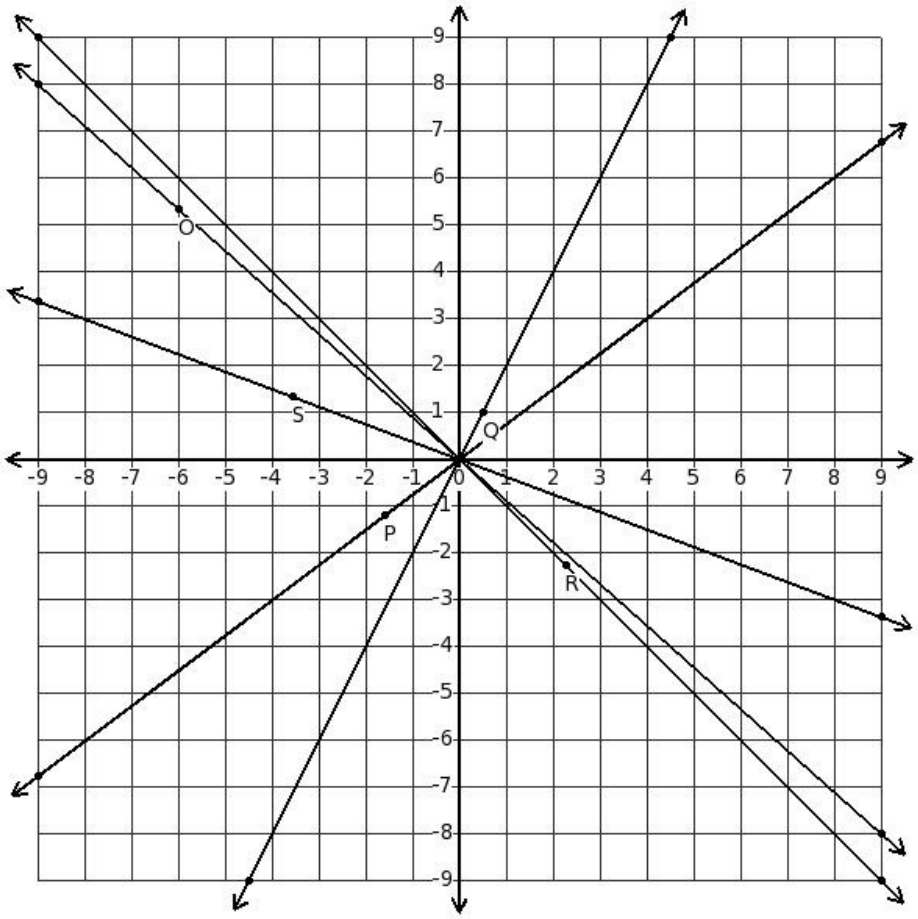

(i) line with point O (ii) line with point Q (iii) line with point R (iv) line with point S (v) line with point P

18. Which of the displayed lines represent the equation $y=(\frac{4}{5}x-\frac{3}{5})$




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

19. Which of the displayed lines represent the equation $y=(-\frac{8}{9}x)$




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

## Assignment Key

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

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