EduSahara™ Worksheet

Name : Chapter Based Worksheet

Chapter : Linear Equation in Two variables

Grade : SSC Grade IX

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

   (i) $(4x-4y)=0$ (ii) $(-8x+2y-46)=0$ (iii) $(6x-2y-16)=0$ (iv) $(3x-9y-24)=0$ (v) $(-x+9y-32)=0$

2. Find the set of points satisfying the equation $(6x+3y-2)=0$

   (i) $((-2),\frac{14}{3}),((-1),\frac{8}{3}),(0,\frac{2}{3}),(0,(-\frac{1}{3})),(2,(-\frac{10}{3}))$ (ii) $((-2),\frac{14}{3}),((-1),\frac{8}{3}),(0,\frac{2}{3}),(1,(-\frac{4}{3})),(4,(-\frac{4}{3}))$

   (iii) $((-2),\frac{14}{3}),((-1),\frac{8}{3}),(1,(-\frac{1}{3})),(1,(-\frac{4}{3})),(2,(-\frac{10}{3}))$

   (iv) $((-2),\frac{14}{3}),((-1),\frac{8}{3}),((-2),(-\frac{4}{3})),(1,(-\frac{4}{3})),(2,(-\frac{10}{3}))$

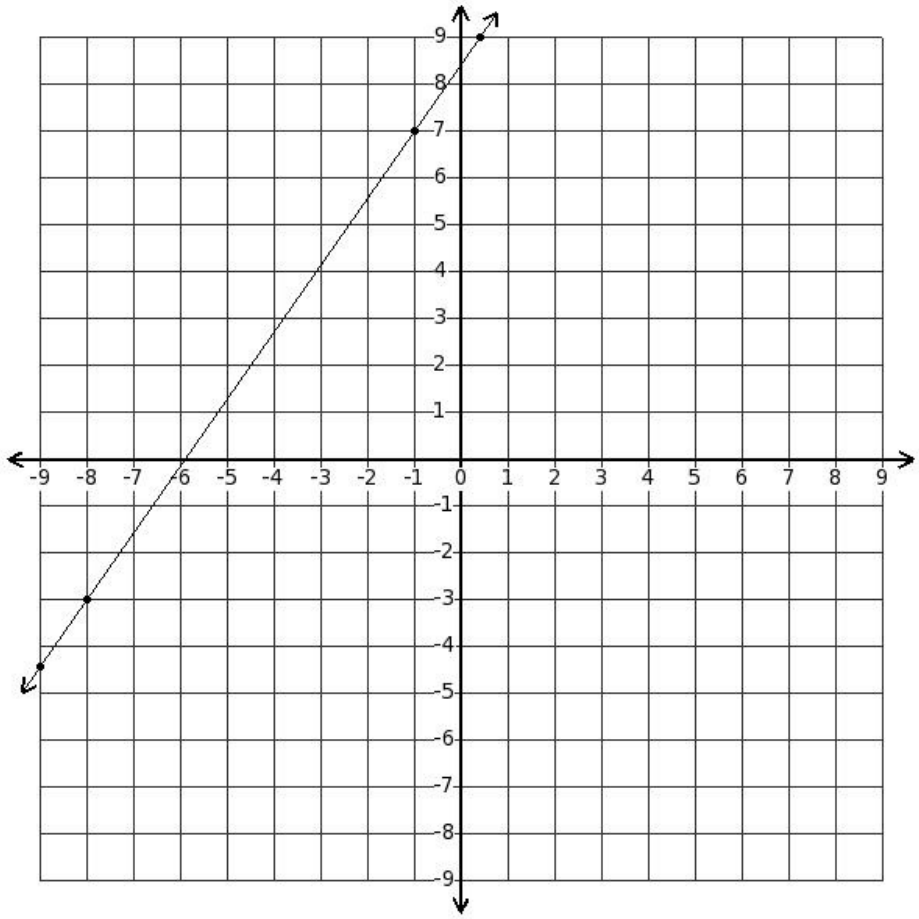
   (v) $((-2),\frac{14}{3}),((-1),\frac{8}{3}),(0,\frac{2}{3}),(1,(-\frac{4}{3})),(2,(-\frac{10}{3}))$

3. Which of the following is a linear equation in two variable?

   (i) $(-5x+5y-4z-1)=(5x+y-z-4)$ (ii) $(4x-9)=(-5x-1)$ (iii) $(-9x+2y+2)=(3x-9y+3)$

   (iv) $(5x^2-44xy+32x+63y^2-42y-21)=0$ (v) $(24x^2-6x)=(-2x+2)$

4. Find the equation of the line passing through the points $((-1),7)$ and $((-8),(-3))$



(i) $(-11x+7y-59)=0$ (ii) $(-10x+7y-66)=0$ (iii) $(-10x+7y-59)=0$ (iv) $(-10x+7y-49)=0$

(v) $(-9x+7y-59)=0$

5. Find the set of points satisfying the equation $y=(-5)$

(i) $((-2),(-5)),((-1),(-5)),(0,(-5)),(0,(-4)),(2,(-5))$

(ii) $((-2),(-5)),((-1),(-5)),(0,(-5)),(1,(-5)),(2,(-5))$

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

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

(v) $((-2),(-5)),((-1),(-5)),(1,(-6)),(1,(-5)),(2,(-5))$

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

(i) $((-4),(-2)),((-4),(-1)),((-4),0),((-5),2),((-4),2)$

(ii) $((-4),(-2)),((-4),(-1)),((-6),(-2)),((-4),1),((-4),2)$

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

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

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

7. Write the given equation $(3x-5y-7)=0$ in $y=mx+c$ form

(i) $y=(x-\frac{7}{5})$ (ii) $y=(\frac{3}{5}x-\frac{7}{5})$ (iii) $y=(\frac{3}{7}x-\frac{7}{5})$ (iv) $y=(\frac{3}{5}x-\frac{9}{5})$ (v) $y=(\frac{3}{5}x-1)$

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

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

9. The linear equation $(2x-5y-7)=(4x-4y-7)$ is equivalent to

(i) $(-2x-y)=0$ (ii) $(2x-5y-7)=(4x-7y-7)$ (iii) $(-3x-y)=0$ (iv) $(2x-5y-7)=(4x-y-7)$

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

10. Find the set of points satisfying the equation $(-10x-9y+8)=0$

(i) $((-2),\frac{28}{9}),((-1),2),((-2),(-\frac{10}{9})),(1,(-\frac{2}{9})),(2,(-\frac{4}{3}))$ (ii) $((-2),\frac{28}{9}),((-1),2),(0,\frac{8}{9}),(1,(-\frac{2}{9})),(4,\frac{2}{3})$

(iii) $((-2),\frac{28}{9}),((-1),2),(0,\frac{8}{9}),(1,(-\frac{2}{9})),(2,(-\frac{4}{3}))$ (iv) $((-2),\frac{28}{9}),((-1),2),(1,(-\frac{1}{9})),(1,(-\frac{2}{9})),(2,(-\frac{4}{3}))$

(v) $((-2),\frac{28}{9}),((-1),2),(0,\frac{8}{9}),(0,\frac{7}{9}),(2,(-\frac{4}{3}))$

11. Find the set of points satisfying the equation $y=(-\frac{13}{2}x)$

(i) $((-2),13),((-1),\frac{13}{2}),(0,0),(1,(-\frac{13}{2})),(4,(-11))$ (ii) $((-2),13),((-1),\frac{13}{2}),(0,0),(1,(-\frac{13}{2})),(2,(-13))$

(iii) $((-2),13),((-1),\frac{13}{2}),(1,(-1)),(1,(-\frac{13}{2})),(2,(-13))$

(iv) $((-2),13),((-1),\frac{13}{2}),(0,0),(0,(-\frac{11}{2})),(2,(-13))$

(v) $((-2),13),((-1),\frac{13}{2}),((-2),(-2)),(1,(-\frac{13}{2})),(2,(-13))$

12. Find the equation of a straight line parallel to y-axis and passing through the point $(9,3)$

(i) $x=8$ (ii) $y=5$ (iii) $y=3$ (iv) $x=9$ (v) $x=12$

13. The value of y in terms of other variables and constant in $(-x-8y-1)=(x+2y-8)$ is

(i) $y=(-\frac{1}{5}x+\frac{9}{10})$ (ii) $y=(-\frac{1}{7}x+\frac{7}{10})$ (iii) $y=(-\frac{1}{3}x+\frac{7}{10})$ (iv) $y=(-\frac{1}{5}x+\frac{7}{10})$ (v) $y=(-\frac{1}{5}x+\frac{1}{2})$

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

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

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

(i) $(1,1)$ (ii) $(4,0)$ (iii) $(0,8)$ (iv) $(0,0)$ (v) $(1,0)$

16. Which of the following equations satisfy the given points $((-2),\frac{38}{3}),((-1),12),(0,\frac{34}{3}),(1,\frac{32}{3}),(2,10)$?

(i) $y=(-\frac{2}{3}x+\frac{34}{3})$ (ii) $y=8$ (iii) $(-12x-18y-18)=0$ (iv) $x=5$ (v) $x=(\frac{2}{3}y-\frac{1}{3})$

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

(i) $(3x+2y-1)=0$ (ii) $y=(-x+10)$ (iii) $(-9x-9y+27)=0$ (iv) $x=y$ (v) $y=5$

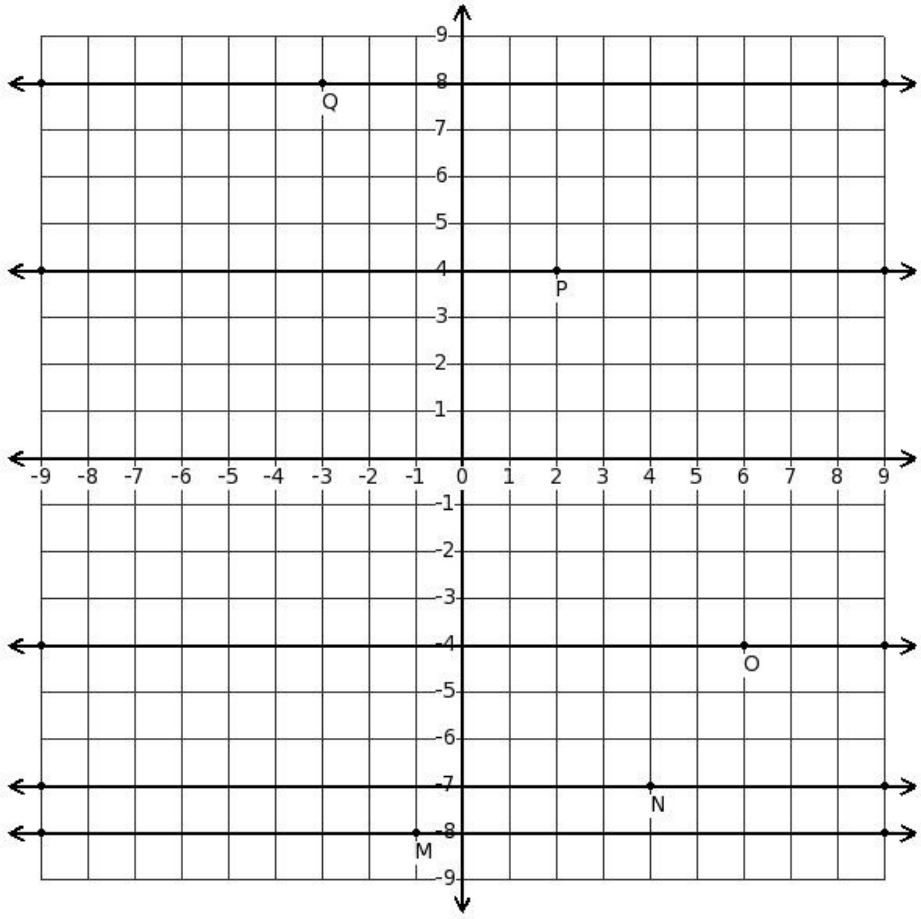
18. Find the equation of a straight line parallel to x-axis and passing through the point $(0,8)$

(i) $x=3$ (ii) $y=8$ (iii) $x=0$ (iv) $y=10$ (v) $y=7$

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

(i) $(-7x+8y)=0$ (ii) $(-5x-6y)=0$ (iii) $(8x-8y)=0$ (iv) $(3x+7y)=0$ (v) $(-x+3y+13)=0$

20. Which of the displayed lines represent the equation $y=(-8)$



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

21. The value of x in terms of other variables and constant in $(-9x+7y-8)=(8x-8y-8)$ is

(i) $x=\frac{15}{17}y$ (ii) $x=\frac{15}{19}y$ (iii) $x=\frac{13}{17}y$ (iv) $x=y$

22. Any line parallel to y-axis is

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

23. Which of the following equations satisfy the given points $((-2),\frac{39}{5}),((-1),\frac{33}{5}),(0,\frac{27}{5}),(1,\frac{21}{5}),(2,3)$?

(i) $x=5$ (ii) $(-12x-10y+54)=0$ (iii) $x=(\frac{6}{5}y+\frac{61}{5})$ (iv) $(8x+5y-3)=0$ (v) $y=(-\frac{6}{5}x)$

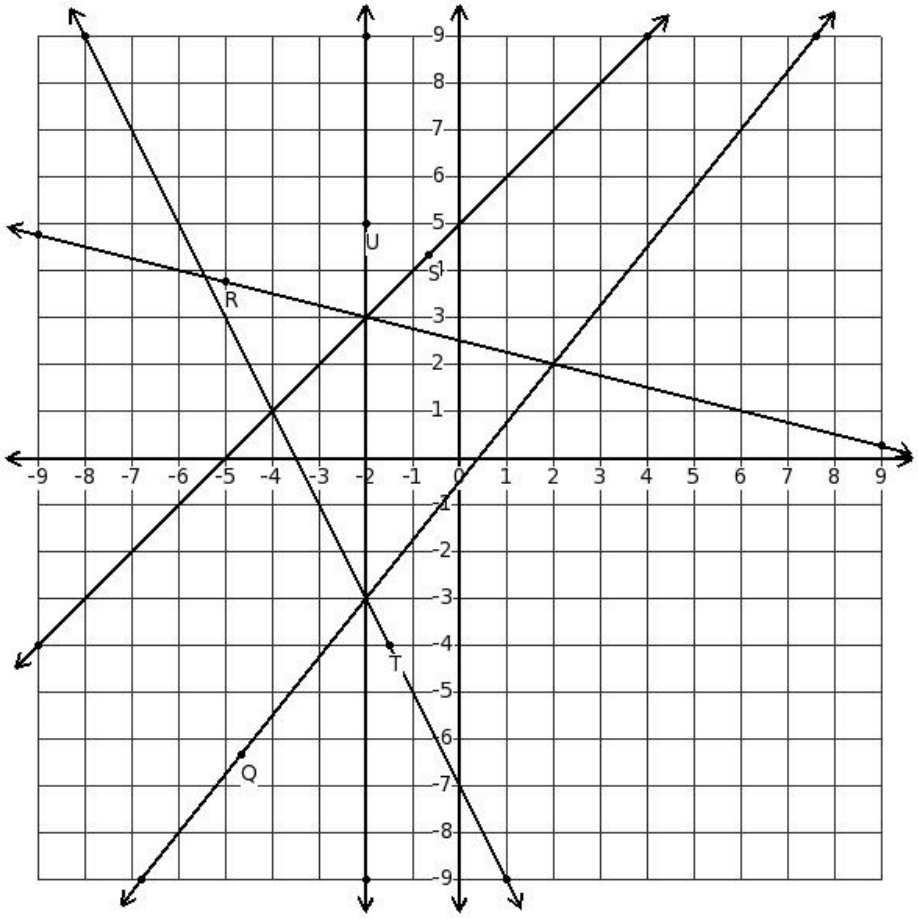
24. Find the set of points satisfying the equation $y=(-\frac{5}{6}x+\frac{11}{3})$

(i) $((-2),\frac{16}{3}),((-1),\frac{9}{2}),(0,\frac{11}{3}),(1,\frac{17}{6}),(2,2)$ (ii) $((-2),\frac{16}{3}),((-1),\frac{9}{2}),(0,\frac{11}{3}),(1,\frac{17}{6}),(4,4)$

(iii) $((-2),\frac{16}{3}),((-1),\frac{9}{2}),((-2),\frac{5}{3}),(1,\frac{17}{6}),(2,2)$ (iv) $((-2),\frac{16}{3}),((-1),\frac{9}{2}),(0,\frac{11}{3}),(0,\frac{23}{6}),(2,2)$

(v) $((-2),\frac{16}{3}),((-1),\frac{9}{2}),(1,\frac{8}{3}),(1,\frac{17}{6}),(2,2)$

25. Which of the displayed lines represent the equation $(5x-4y-2)=0$?



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

Assignment Key

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