EduSahara™ Assignment

Name : Linear Equations Concepts

Chapter : Linear Equations in two Variables

Grade : CBSE Grade IX

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

   (i) $(9x^2-46x-48)=0$ (ii) $(24x^2-44xy-61x+16y^2+28y-8)=0$ (iii) $(-2x+2y+8z-3)=0$

   (iv) $(5x-2)=0$ (v) $(4x-9y-2)=0$

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

   (i) $(18x^2-71xy-55x-45y^2+20y+25)=0$ (ii) $(2x+7y-5)=(-6x-5y+9)$

   (iii) $(-2x-y+2z-2)=(-5x-8y-6z+7)$ (iv) $(-40x^2+24x)=x$ (v) $(3x-9)=(-8x-9)$

3. The linear equation $(-8x+7y+7)=(4x-6y-5)$ is equivalent to

   (i) $(-8x+7y+7)=(4x-8y-5)$ (ii) $(-12x+13y+12)=0$ (iii) $(-8x+7y+7)=(4x-4y-5)$

   (iv) $(-11x+13y+12)=0$ (v) $(-13x+13y+12)=0$

4. The value of x in terms of other variables and constant in $(4x+y+3)=(-2x+3y+2)$ is

   (i) $x=(\frac{1}{5}y-\frac{1}{6})$ (ii) $x=(y-\frac{1}{6})$ (iii) $x=(\frac{1}{3}y+\frac{1}{6})$ (iv) $x=(\frac{1}{3}y-\frac{1}{6})$ (v) $x=(\frac{1}{3}y-\frac{1}{2})$

5. The value of y in terms of other variables and constant in $(6x+4y+1)=(x+9y+3)$ is

   (i) $y=(-\frac{2}{5})$ (ii) $y=(x-\frac{2}{5})$ (iii) $y=(x-\frac{4}{5})$ (iv) $y=(2x-\frac{2}{5})$ (v) $y=x$

6. Find the set of points satisfying the equation $(-15x-6y+24)=0$

   (i) $((-2),9),((-1),\frac{13}{2}),(1,3),(1,\frac{3}{2}),(2,(-1))$ (ii) $((-2),9),((-1),\frac{13}{2}),(0,4),(1,\frac{3}{2}),(2,(-1))$

   (iii) $((-2),9),((-1),\frac{13}{2}),((-2),2),(1,\frac{3}{2}),(2,(-1))$ (iv) $((-2),9),((-1),\frac{13}{2}),(0,4),(0,\frac{5}{2}),(2,(-1))$

   (v) $((-2),9),((-1),\frac{13}{2}),(0,4),(1,\frac{3}{2}),(4,1)$

7. Find the set of points satisfying the equation $y=(-\frac{5}{4}x+\frac{7}{4})$

   (i) $((-2),\frac{17}{4}),((-1),3),(0,\frac{7}{4}),(1,\frac{1}{2}),(4,\frac{5}{4})$ (ii) $((-2),\frac{17}{4}),((-1),3),(1,\frac{3}{4}),(1,\frac{1}{2}),(2,(-\frac{3}{4}))$

   (iii) $((-2),\frac{17}{4}),((-1),3),(0,\frac{7}{4}),(0,\frac{3}{2}),(2,(-\frac{3}{4}))$ (iv) $((-2),\frac{17}{4}),((-1),3),((-2),(-\frac{1}{4})),(1,\frac{1}{2}),(2,(-\frac{3}{4}))$

   (v) $((-2),\frac{17}{4}),((-1),3),(0,\frac{7}{4}),(1,\frac{1}{2}),(2,(-\frac{3}{4}))$

8. Find the set of points satisfying the equation $x=(-\frac{2}{5}y+\frac{31}{5})$

(i) $((-2),\frac{41}{2}),((-1),18),(0,\frac{31}{2}),(1,13),(4,\frac{25}{2})$ (ii) $((-2),\frac{41}{2}),((-1),18),(0,\frac{31}{2}),(1,13),(2,\frac{21}{2})$

(iii) $((-2),\frac{41}{2}),((-1),18),(1,\frac{29}{2}),(1,13),(2,\frac{21}{2})$ (iv) $((-2),\frac{41}{2}),((-1),18),((-2),\frac{27}{2}),(1,13),(2,\frac{21}{2})$

(v) $((-2),\frac{41}{2}),((-1),18),(0,\frac{31}{2}),(0,14),(2,\frac{21}{2})$

9. Find the set of points satisfying the equation $y=2x$

(i) $((-2),(-4)),((-1),(-2)),((-2),(-2)),(1,2),(2,4)$ (ii) $((-2),(-4)),((-1),(-2)),(0,0),(0,3),(2,4)$

(iii) $((-2),(-4)),((-1),(-2)),(0,0),(1,2),(4,6)$ (iv) $((-2),(-4)),((-1),(-2)),(1,(-1)),(1,2),(2,4)$

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

10. Find the set of points satisfying the equation $(9x+8y-4)=0$

(i) $((-2),\frac{11}{4}),((-1),\frac{13}{8}),(1,(-\frac{1}{2})),(1,(-\frac{5}{8})),(2,(-\frac{7}{4}))$

(ii) $((-2),\frac{11}{4}),((-1),\frac{13}{8}),(0,\frac{1}{2}),(1,(-\frac{5}{8})),(2,(-\frac{7}{4}))$

(iii) $((-2),\frac{11}{4}),((-1),\frac{13}{8}),((-2),(-\frac{3}{2})),(1,(-\frac{5}{8})),(2,(-\frac{7}{4}))$

(iv) $((-2),\frac{11}{4}),((-1),\frac{13}{8}),(0,\frac{1}{2}),(0,\frac{3}{8}),(2,(-\frac{7}{4}))$ (v) $((-2),\frac{11}{4}),((-1),\frac{13}{8}),(0,\frac{1}{2}),(1,(-\frac{5}{8})),(4,\frac{1}{4})$

11. Find the set of points satisfying the equation $y=(-9)$

(i) $((-2),(-9)),((-1),(-9)),(1,(-10)),(1,(-9)),(2,(-9))$

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

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

(iv) $((-2),(-9)),((-1),(-9)),((-2),(-11)),(1,(-9)),(2,(-9))$

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

12. Find the set of points satisfying the equation $x=8$

(i) $(8,(-2)),(8,(-1)),(8,0),(8,1),(10,4)$ (ii) $(8,(-2)),(8,(-1)),(9,(-1)),(8,1),(8,2)$

(iii) $(8,(-2)),(8,(-1)),(8,0),(8,1),(8,2)$ (iv) $(8,(-2)),(8,(-1)),(6,(-2)),(8,1),(8,2)$

(v) $(8,(-2)),(8,(-1)),(8,0),(7,2),(8,2)$

13. Which of the following equations satisfy the given points $((-2),\frac{5}{13}),((-1),(-\frac{11}{13})),(0,(-\frac{27}{13})),(1,(-\frac{43}{13})),(2,(-\frac{59}{13}))$?

(i) $(-16x-13y-27)=0$ (ii) $y=(-5)$ (iii) $(6x+3y-2)=0$ (iv) $x=(\frac{16}{13}y+\frac{15}{13})$ (v) $y=(-\frac{16}{13}x-\frac{145}{13})$

14. Which of the following equations satisfy the given points $((-2),\frac{93}{8}),((-1),\frac{39}{4}),(0,\frac{63}{8}),(1,6),(2,\frac{33}{8})$?

(i) $(12x+7y-3)=0$ (ii) $y=6$ (iii) $x=(\frac{15}{8}y-\frac{41}{4})$ (iv) $y=(-\frac{15}{8}x+\frac{63}{8})$ (v) $(-15x-8y+33)=0$

15. Which of the following equations satisfy the given points $((-2),\frac{2}{3}),((-1),\frac{5}{12}),(0,\frac{1}{6}),(1,(-\frac{1}{12})),(2,(-\frac{1}{3}))$?

(i) $y=(-\frac{3}{14}x+\frac{43}{7})$ (ii) $x=(\frac{3}{14}y-\frac{11}{2})$ (iii) $(-3x-14y-13)=0$ (iv) $(3x+12y-2)=0$ (v) $y=7$

16. Which of the following equations satisfy the given points $((-2),8),((-1),8),(0,8),(1,8),(2,8)$?

(i) $(54x+49y-42)=0$ (ii) $x=3$ (iii) $x=(\frac{11}{12}y-\frac{13}{3})$ (iv) $y=8$ (v) $y=(-\frac{11}{12}x+\frac{43}{4})$

17. Which of the following equations satisfy the given points $((-4),(-2)),((-4),(-1)),((-4),0),((-4),1),((-4),2)$?

(i) $y=1$ (ii) $x=(-4)$ (iii) $(6x+5y-4)=0$ (iv) $(-11x-9y-34)=0$ (v) $x=(\frac{11}{9}y-\frac{47}{9})$

Assignment Key

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