EduSahara™ Worksheet

Name : Chapter Based Worksheet

Chapter : Linear Equations and Simultaneous Linear Equations

Grade : ICSE Grade IX

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1. Which of the following equations is not the same as $(-8x+3)=(5x-7)$

   (i) $(-8x+5)=(5x-5)$ (ii) $(-8x+1)=(5x-9)$ (iii) $(-8x-2)=(5x-12)$ (iv) $(-8x+2)=(5x-6)$

   (v) $(-8x+8)=(5x-2)$

2. Which of the following equations is not equivalent to $(-3x+9)=3$

   (i) $(-12x)=(-24)$ (ii) $(-3x)=(-9)$ (iii) $(-6x)=(-12)$ (iv) $3x=6$ (v) $15x=30$

3. The R.H.S of the equation $(5x+3)=0$ is

   (i) (-1) (ii) (-2) (iii) $(5x+3)$ (iv) 2 (v) 0

4. Which of the following equations is the same as $(9x-8)=(-7x+3)$

   (i) $(18x-11)=(-14x+6)$ (ii) $(18x-16)=(-14x+5)$ (iii) $(18x-21)=(-14x+6)$

   (iv) $(18x-16)=(-14x+6)$ (v) $(18x-16)=(-14x+7)$

5. Solve the following pair of equations :

$$\frac{8}{x} + 6y = (-44)$$

$$-\frac{3}{x} + 5y = (-27)$$

   (i) $(1,-6)$ (ii) $(\frac{1}{-1},-7)$ (iii) $(\frac{1}{-1},-6)$ (iv) $(\frac{1}{-1},-9)$ (v) $(0,-6)$

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

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

7. Solve : $\frac{(-4x-3)}{3} + \frac{(5x+1)}{2} = (-x+4)$

   (i) $\frac{25}{13}$ (ii) $\frac{27}{13}$ (iii) $\frac{23}{11}$ (iv) $\frac{31}{15}$ (v) $\frac{29}{13}$

8. Solve the equation $(x+8)=0$

   (i) -11 (ii) -5 (iii) -9 (iv) -7 (v) -8

9. Which of the following equations is not the same as $(2x+2)=0$

(i) $(10x+5)=(8x+3)$ (ii) $(-6x-1)=(8x+3)$ (iii) $(-x+4)=(-3x+2)$ (iv) $(-6x-1)=(-8x-3)$

(v) $5x=(3x-2)$

10. Which of the following is a linear equation in three variable?

(i) $(-2x-7y+3z-3)=0$ (ii) $(-36x^2-6xy+30x+42y^2-56y+14)=0$ (iii) $(-6x-y-1)=0$

(iv) $(4x+7)=0$ (v) $(-7x^2+55x+72)=0$

11. Which of the following equations is not the same as $(-2x-9)=0$

(i) $(-2x-14)=(-5)$ (ii) $(-2x-4)=5$ (iii) $(-2x-12)=(-3)$ (iv) $(-2x-11)=2$ (v) $(-2x-6)=3$

12. Which of the following equations is the same as $(-5x-9)=0$

(i) $(-8x-14)=(3x+5)$ (ii) $(-2x-4)=(-3x-5)$ (iii) $(-13x-6)=(-8x+3)$ (iv) $(3x-12)=(-8x+3)$

(v) $(-13x-6)=(8x-3)$

13. The equation of y-axis is

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

14. Solve the equation $(-\frac{7}{6}x+\frac{4}{3})=0$

(i) $\frac{6}{5}$ (ii) $\frac{10}{9}$ (iii) $\frac{8}{7}$ (iv) $\frac{10}{7}$ (v) $\frac{6}{7}$

15. The value of x in terms of other variables and constant in $(-4x-9)=(-3x+4)$ is

(i) $x=(-12)$ (ii) $x=(-10)$ (iii) $x=(-15)$ (iv) $x=(-14)$ (v) $x=(-13)$

16. Solve : $\frac{(x+3)}{2}+\frac{(x-2)}{8}=\frac{(-x+1)}{4}$

(i) $(\frac{-6}{5})$ (ii) $(\frac{-10}{9})$ (iii) $(\frac{-6}{7})$ (iv) $(\frac{-8}{7})$ (v) $(\frac{-10}{7})$

17. Which of the following equations satisfy the given points $((-2),\frac{22}{21}),((-1),\frac{2}{3}),(0,\frac{2}{7}),(1,(-\frac{2}{21})),(2,(-\frac{10}{21}))$?

(i) $(-13x-7y-22)=0$ (ii) $y=4$ (iii) $x=(-8)$ (iv) $y=(-\frac{13}{7}x-\frac{76}{7})$ (v) $(8x+21y-6)=0$

18. Solve : $\frac{(x+2)}{6}+\frac{(x+5)}{2}=(-x+3)$

(i) $\frac{1}{12}$ (ii) $\frac{1}{8}$ (iii) $\frac{1}{10}$ (iv) $\frac{3}{10}$ (v) $(\frac{-1}{10})$

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

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

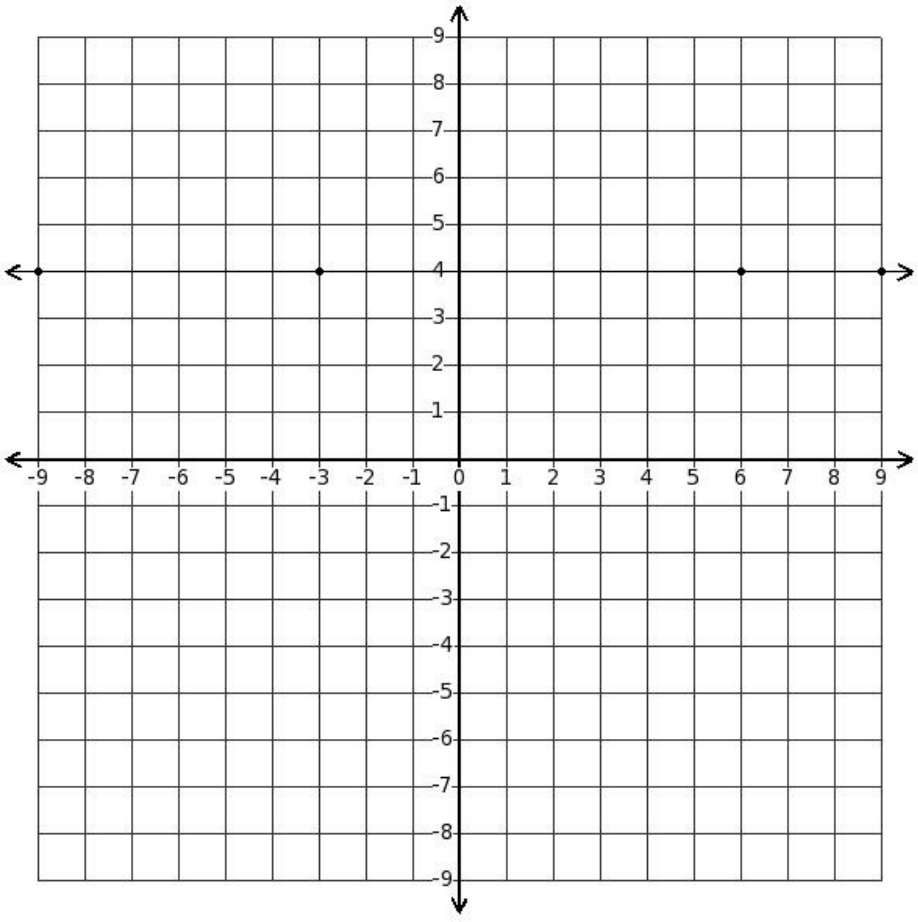
(iii) $((-2),\frac{1}{1}),((-1),\frac{2}{3}),(1,(-\frac{2}{3})),(1,0),(2,(-\frac{1}{3}))$ (iv) $((-2),\frac{1}{1}),((-1),\frac{2}{3}),(0,\frac{1}{3}),(1,0),(2,(-\frac{1}{3}))$

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

20. Which of the following equations satisfy the given points $((-2),29),((-1),\frac{53}{2}),(0,24),(1,\frac{43}{2}),(2,19)$?

(i) $(-10x-4y-2)=0$ (ii) $(4x+12y-3)=0$ (iii) $x=8$ (iv) $x=(\frac{5}{2}y-2)$ (v) $y=(-\frac{5}{2}x+24)$

21. Find the equation of the line passing through the points $((-3),4)$ and $(6,4)$

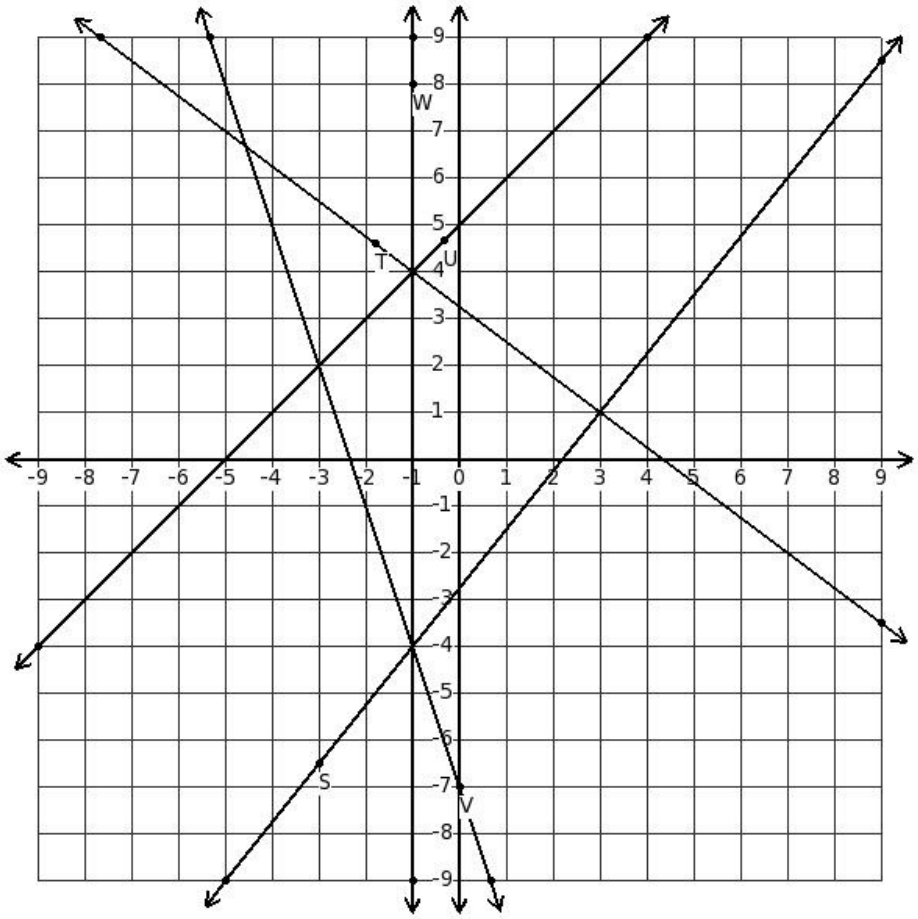


(i) $(y-4)=0$ (ii) $(-9y+36)=0$ (iii) $(y-5)=0$ (iv) $(-8y+36)=0$ (v) $(-10y+36)=0$

22. What number must be added to each term of the ratio $14:28$ to make it $17:18$?

(i) 223 (ii) 225 (iii) 224 (iv) 226 (v) 221

23. Which of the displayed lines represent the equation $(5x-4y-11)=0$?



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

24. Solve : $-\frac{6}{(x+8)}-\frac{5}{(x-8)}=-\frac{11}{x}$

(i) 88 (ii) 85 (iii) 87 (iv) 91 (v) 89

25. Which of the following is a linear equation in three variable?

(i) $(-8x^2+26xy+24x-21y^2-44y+32)=0$ (ii) $(-6x+7y-2z+8)=(3x+2y-5z+8)$

(iii) $(9x-5)=(3x-8)$ (iv) $(6x^2+20x+16)=(-9x-5)$ (v) $(-7x+5y-8)=(7x+4y-6)$

Assignment Key

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