EduSahara™ Worksheet

Name : Chapter Based Worksheet

Chapter : Linear Equations in One Variable

Grade : SSC Grade VIII

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

   (i) $x=(-2)$ (ii) $x=(-6)$ (iii) $x=(-4)$ (iv) $x=(-3)$ (v) $x=(-1)$

2. A and B together can do a piece of work in $6\frac{9}{26}$ hr.
   They work together for 1 hr and then A leaves.
   B completes the remaining work in $12\frac{7}{11}$ hr.
   In how much time can each of them do the work seperately?

   (i) (11 hr, 14 hr) (ii) (11 hr, 16 hr) (iii) (12 hr, 15 hr) (iv) (10 hr, 15 hr) (v) (11 hr, 15 hr)

3. In a company, the number of engineers to managers is in the ratio 5 : 2 . After a year, when 15 engineers and 15 managers left, the ratio between engineers to managers is 17 : 5 . Find the number of engineers and managers at the beginning?

   (i) 150 (ii) 160 (iii) 130 (iv) 140 (v) 120

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

   (i) -41 (ii) -39 (iii) -42 (iv) -40 (v) -37

5. Which of the following equations is not the same as $(2x+4)=0$

   (i) $2x=(-4)$ (ii) $(2x+7)=(-3)$ (iii) $(2x+8)=4$ (iv) $(2x+2)=(-2)$ (v) $(2x+6)=2$

6. Which of the following equations is not the same as $(-8x-7)=(-9)$

   (i) $(-8x-11)=(-13)$ (ii) $(-8x-6)=(-10)$ (iii) $(-8x-12)=(-14)$ (iv) $(-8x-3)=(-5)$

   (v) $(-8x-2)=(-4)$

7. The L.H.S of the equation $7x=0$ is

   (i) $10x$ (ii) 0 (iii) $5x$ (iv) $7x$ (v) $6x$

8. A ratio is equal to 25 : 3. If its consequent is 525, what is its antecendent?

   (i) 4374 (ii) 4375 (iii) 4378 (iv) 4376 (v) 4372

9. Which of the following equations is not the same as $(-2x+1)=(-5x+5)$

   (i) $(2x-8)=(-x-4)$ (ii) $(-4)=(-3x)$ (iii) $(-6x+10)=(-x-4)$ (iv) $(-6x+10)=(-9x+14)$

   (v) $(-4x+6)=(-7x+10)$

10. Two numbers are in the ratio 12 : 15. If 16 is added to each number, the ratio becomes 14 : 17. Find the numbers.

    (i) 108:135 (ii) 96:120 (iii) 72:90 (iv) 120:150 (v) 84:105

11. A train crosses a telegraph post in 49.25 sec and a bridge 1309.06 m long in 78.70 sec. What is the length of the train?

(i) 2190.16 m (ii) 2191.16 m (iii) 2189.16 m (iv) 2187.16 m (v) 2188.16 m

12. Which of the following equations is the same as $(-7x+6)=(2x+2)$

(i) $(-16x+8)=11x$ (ii) $(-16x+8)=(-7x+4)$ (iii) $(-3x+5)=(-2x+3)$ (iv) $(2x+4)=(-7x+4)$

(v) $(-11x+7)=(6x+1)$

13. The additive inverse of the expression (-2) is

(i) 2 (ii) 1 (iii) (-2) (iv) 5 (v) 0

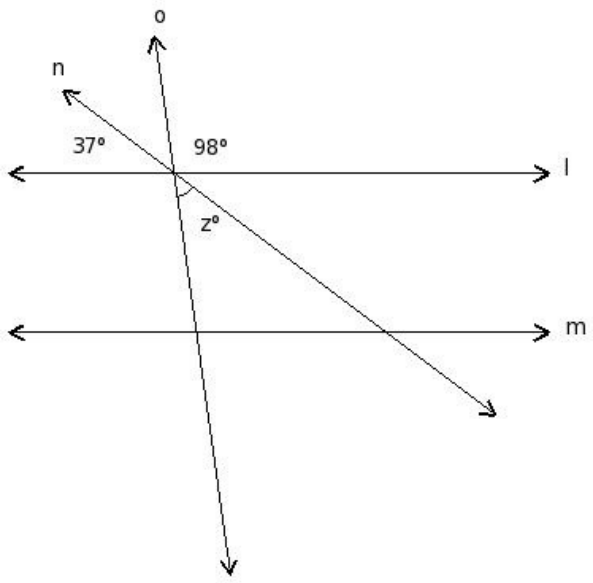
14. Solve : $\frac{(-3x+2)}{16} + \frac{(5x-1)}{8} = (3x-3)$

(i) $\frac{50}{43}$ (ii) $\frac{50}{41}$ (iii) $\frac{46}{39}$ (iv) $\frac{48}{41}$ (v) $\frac{46}{41}$

15. Solve : $\frac{5}{(x+9)} - \frac{7}{(x+4)} = \frac{4}{(x+4)} - \frac{6}{(x+3)}$

(i) $(\frac{-21}{19})$ (ii) $(\frac{-23}{19})$ (iii) -1 (iv) $(\frac{-23}{21})$ (v) $(\frac{-19}{17})$

16. In the given figure l ∥ m. Find the value of 'z'



(i) 55° (ii) 50° (iii) 60° (iv) 45° (v) 75°

17. Which of the following equations is not equivalent to $(-x-2)=(9x-4)$

(i) $(-30x)=(-6)$ (ii) $(-10x)=2$ (iii) $(-10x)=(-2)$ (iv) $20x=4$ (v) $(-20x)=(-4)$

18. A certain amount has been divided into two parts in the ratio 8 : 4. If the first part is 304, find the total amount.

(i) 458 (ii) 455 (iii) 454 (iv) 457 (v) 456

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

(i) $(8x+5y-8)=0$ (ii) $(-9x^2-69xy-34x-42y^2-67y-21)=0$ (iii) $(-5x-2)=0$

(iv) $(-5x-9y-2z-3)=0$ (v) $(-16x^2-6x+7)=0$

20. Solve : $\frac{(3x-5)}{(x-7)} = \frac{1}{(-6)}$

(i) $\frac{35}{17}$ (ii) $\frac{37}{19}$ (iii) $\frac{39}{19}$ (iv) $\frac{13}{7}$ (v) $\frac{35}{19}$

21. The work done by (3x + 1) men in (4x + 1) days and work done by (9x + 1) men in (2x + 1) days is in the ratio of 65 : 98 . Find the value of x

(i) 3 (ii) 6 (iii) 1 (iv) 2 (v) 4

22. The L.H.S of the equation $(2x-7)=(-1)$ is

(i) $(2x-10)$ (ii) $(x-7)$ (iii) $(2x-7)$ (iv) (-1) (v) $(2x-4)$

23. Which of the following equations is the same as $(-8x+4)=6x$

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

(v) $(-8x+7)=(6x+1)$

24. Which of the following equations is not the same as $(x+8)=(7x+6)$

(i) $(x+7)=(7x+5)$ (ii) $(x+9)=(7x+7)$ (iii) $(x+6)=(7x+4)$ (iv) $(x+12)=(7x+2)$

(v) $(x+10)=(7x+8)$

25. A box contains 340 fruits of 3 types. The mangoes, apples, and oranges are in the ratio 3 : 1 : 6. The number of mangoes in the box =

(i) 100 (ii) 101 (iii) 103 (iv) 104 (v) 102

Assignment Key

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