EduSahara™ Worksheet

Name : Chapter Based Worksheet

Chapter : Linear Equations in One Variable

Grade : SSC Grade VIII

1. A man reduces his weight in the ratio 16 : 11. What is his weight now, if originally he was 94 kg ?

   (i) $\frac{525}{8}$ kg (ii) $\frac{517}{8}$ kg (iii) $\frac{519}{8}$ kg (iv) $\frac{533}{8}$ kg (v) $\frac{259}{4}$ kg

2. Which of the following equations is not the same as $(-9x+1)=0$

   (i) $(-5x-2)=(4x-3)$ (ii) $(-18x+3)=(-9x+2)$ (iii) $(-13x+4)=(-4x+3)$ (iv) $(-1)=(9x-2)$

   (v) $(-5x-2)=(-4x+3)$

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

   (i) $\frac{4}{13}$ (ii) $\frac{2}{13}$ (iii) $\frac{2}{11}$ (iv) 0 (v) $\frac{2}{15}$

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

   (i) $x=(-9x-9)$ (ii) $(-x+3y+4z+7)=(6x-6y-4z-5)$ (iii) $(-10x^2-38xy-15x+8y^2-39y-5)=0$

   (iv) $(-35x^2-31x+18)=(-8x-5)$ (v) $(2x+y-4)=(-2x+9y+3)$

5. An office contains 560 employees of 4 types. The managers, team leaders, developers and testers are in the ratio 3 : 6 : 2 : 3. The number of managers in the office =

   (i) 122 (ii) 119 (iii) 121 (iv) 120 (v) 117

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

   (i) -11 (ii) -15 (iii) -14 (iv) -13 (v) -17

7. What number must be added to each term of the ratio $36:180$ to make it $17:29$?

   (i) 169 (ii) 168 (iii) 165 (iv) 171 (v) 167

8. The R.H.S of the equation $(5x+7)=(-4x+4)$ is

   (i) $(-5x+4)$ (ii) $(-4x+4)$ (iii) $(-4x+7)$ (iv) $(-4x+1)$ (v) $(5x+7)$

9. The speed of a motor boat is 15.35 m/sec and the speed of a stream is 7.35 m/sec. A & B are two location adjacent to a stream. If it takes 461.85 sec to go from point A to B and come back, What is the distance between A and B?

   (i) 2729.99 m (ii) 2732.99 m (iii) 2731.99 m (iv) 2730.99 m (v) 2733.99 m

10. Which of the following equations is equivalent to $(-4x+5)=0$

    (i) $(-4x)=(-7)$ (ii) $(-4x)=(-1)$ (iii) $(-4x)=(-5)$ (iv) $(-4x)=(-3)$ (v) $(-4x)=(-9)$

11. Which of the following equations is the same as $(-x+3)=0$

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

12. Which of the following equations is the same as $(-x+6)=5$

(i) $(4x-20)=(-20)$ (ii) $(4x-24)=(-17)$ (iii) $(4x-24)=(-23)$ (iv) $(4x-28)=(-20)$

(v) $(4x-24)=(-20)$

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

(i) $(-8x-8)=(-4x+1)$ (ii) $(-8x-12)=(-4x+1)$ (iii) $(-8x-10)=(-4x-4)$ (iv) $(-8x-10)=(-4x+6)$

(v) $(-8x-10)=(-4x+1)$

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

(i) $(8x-2)=6$ (ii) $(8x-7)=9$ (iii) $8x=8$ (iv) $(8x-4)=4$ (v) $(8x-6)=2$

15. Solve : $\frac{(-9x-4)}{(6x+4)}=\frac{(-9x-8)}{(6x-1)}$

(i) $(\frac{-4}{7})$ (ii) $(\frac{-14}{23})$ (iii) $(\frac{-12}{23})$ (iv) $(\frac{-12}{25})$ (v) $(\frac{-10}{23})$

16. The sides of a triangle are in the ratio $\frac{1}{3}:\frac{1}{5}:\frac{1}{4}$ and its perimeter is 846 cm.

Find the lengths of the sides of the triangle

(i) $365\text{cm}:211\text{cm}:270\text{cm}$ (ii) $360\text{cm}:216\text{cm}:270\text{cm}$ (iii) $365\text{cm}:216\text{cm}:265\text{cm}$

(iv) $355\text{cm}:221\text{cm}:270\text{cm}$ (v) $355\text{cm}:216\text{cm}:275\text{cm}$

17. Which of the following equations is the same as $(-3x+9)=(-2)$

(i) $(-3x+11)=2$ (ii) $(-3x+13)=2$ (iii) $(-3x+13)=(-3)$ (iv) $(-3x+13)=7$ (v) $(-3x+15)=2$

18. A and B together can do a piece of work in $5\frac{11}{23}\text{ hr}$.

They work together for 1 hr and then A leaves.

B completes the remaining work in $11\frac{4}{9}\text{ hr}$.

In how much time can each of them do the work seperately?

(i) $(9\text{hr},15\text{hr})$ (ii) $(9\text{hr},13\text{hr})$ (iii) $(10\text{hr},14\text{hr})$ (iv) $(9\text{hr},14\text{hr})$ (v) $(8\text{hr},14\text{hr})$

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

(i) $(8x+3y+5z-5)=0$ (ii) $(-8x)=0$ (iii) $(3x+y+7)=0$ (iv) $(12x^2+11x-15)=0$

(v) $(-25x^2+50xy-16y^2-48y+64)=0$

20. Which of the following equations is not the same as $(-x+1)=0$

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

21. Which of the following equations is not the same as $(-7x-1)=0$

(i) $(-3x+4)=(4x+5)$ (ii) $0=(7x+1)$ (iii) $(-11x-6)=(4x+5)$ (iv) $(-11x-6)=(-4x-5)$

(v) $(-14x-2)=(-7x-1)$

22. In a company, the number of engineers to managers is in the ratio 7 : 6 . After a year, when 10 engineers and 20 managers left, the ratio between engineers to managers is 41 : 34 . Find the number of engineers and managers at the beginning?

(i) 780 (ii) 790 (iii) 800 (iv) 760 (v) 770

23. In an examination, the ratio of passes to failures was 7 : 2.
Had 20 less appeared and 10 less passed, the ratio of passes to failures would have been 41 : 11.
How many students appeared for the examination?

(i) 545 (ii) 535 (iii) 540 (iv) 550 (v) 530

24. The ratio of two numbers is
$2:4$
and their LCM is 44. Find the numbers.

(i) $22:44$ (ii) $20:40$ (iii) $24:48$ (iv) $18:36$ (v) $26:52$

25. A student walks from his house to school at 4.84 kmph and arrives 5.40 min late. The next day he walks at 6.09 kmph and reaches the school 2.90 min before time. At what speed must he travel to reach the school on time?

(i) 7.59 kmph (ii) 4.59 kmph (iii) 3.59 kmph (iv) 6.59 kmph (v) 5.59 kmph

Assignment Key

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