EduSahara™ Worksheet

Name : Chapter Based Worksheet

Chapter : Simple Linear Equations

Grade : ICSE Grade VIII

1. Which of the following equations is the same as $(5x+8)=0$

   (i) $(-3x-1)=(8x+9)$ (ii) $(13x+17)=(-8x-9)$ (iii) $(13x+17)=(8x+9)$ (iv) $(7x+5)=(-2x+3)$

   (v) $(3x+11)=(2x-3)$

2. Solve the equation $(\frac{9}{4}x+\frac{7}{4})=(4x-\frac{8}{9})$

   (i) $\frac{97}{63}$ (ii) $\frac{95}{63}$ (iii) $\frac{31}{21}$ (iv) $\frac{97}{65}$ (v) $\frac{93}{61}$

3. What number must be added to each term of the ratio $162:198$ to make it $25:27$?

   (i) 287 (ii) 290 (iii) 288 (iv) 285 (v) 289

4. Which of the following equations is the same as $(4x-3)=(-2x-8)$

   (i) $(3x-4)=(-x-7)$ (ii) $(11x+5)=(-9x-16)$ (iii) $(5x-2)=(-3x-9)$ (iv) $(3x-4)=(-3x-9)$

   (v) $(-3x-11)=5x$

5. A ratio is equal to 49 : 4. If its antecendent is 3920, what is its consequent?

   (i) 322 (ii) 317 (iii) 320 (iv) 321 (v) 319

6. Which of the following equations is not equivalent to $(-6x-5)=(-9x+3)$

   (i) $3x=10$ (ii) $(-12x)=(-32)$ (iii) $(-3x)=(-8)$ (iv) $15x=40$ (v) $(-9x)=(-24)$

7. A student walks from his house to school at 2.40 kmph and arrives 2.70 min late. The next day he walks at 6.63 kmph and reaches the school 32.70 min before time. What is the distance from his house to school?

   (i) 3.22 km (ii) 4.22 km (iii) 1.22 km (iv) 2.22 km (v) 0.22 km

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

   (i) $\frac{2}{29}$ (ii) $\frac{2}{33}$ (iii) $\frac{2}{31}$ (iv) 0 (v) $\frac{4}{31}$

9. In an examination, the ratio of passes to failures was 3 : 2.
   Had 40 less appeared and 15 less passed, the ratio of passes to failures would have been 5 : 3.
   How many students appeared for the examination?

   (i) 410 (ii) 405 (iii) 390 (iv) 400 (v) 395

10. Which of the following equations is not the same as $(x-3)=(-1)$

    (i) $(-4)=(-x-2)$ (ii) $(2x-2)=x$ (iii) $(-2x+5)=(-3x+7)$ (iv) $(-4)=x$ (v) $(4x-11)=(3x-9)$

11. Solve : $\frac{(-5x-2)}{(9x-5)} = \frac{(-5x+3)}{(9x-9)}$

(i) $\frac{31}{25}$ (ii) $\frac{31}{23}$ (iii) $\frac{33}{25}$ (iv) $\frac{35}{27}$ (v) $\frac{7}{5}$

Person P is ten times as good a workman as Person Q.

12. They can do a work together in $7\frac{3}{11}$ days.

In how many days Q alone can do the work?

(i) 82 days (ii) 79 days (iii) 78 days (iv) 81 days (v) 80 days

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

(i) -3 (ii) -6 (iii) -8 (iv) -5 (v) -4

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14. Solve : $\frac{(-9)}{(-7x+2)} = \frac{7}{(-7x-2)}$

(i) $(\frac{-1}{26})$ (ii) $(\frac{-1}{30})$ (iii) $(\frac{-1}{28})$ (iv) $\frac{1}{28}$ (v) $(\frac{-3}{28})$

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15. Which of the following equations is the same as $(9x-2)=(4x+8)$

(i) $(18x-4)=(8x+11)$ (ii) $(18x-4)=(8x+16)$ (iii) $(18x-4)=(8x+21)$ (iv) $(18x-2)=(8x+16)$

(v) $(18x-6)=(8x+16)$

The ratio of two numbers is

16. 1:2

and their LCM is 24. Find the numbers.

(i) 13:26 (ii) 12:24 (iii) 10:20 (iv) 14:28 (v) 11:22

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17. Which of the following equations is the same as $(2x+1)=(5x+4)$

(i) $(3x+2)=(4x+3)$ (ii) $x=(6x+5)$ (iii) $(-6x+10)=(13x-5)$ (iv) $(10x-8)=(-3x+13)$

(v) $(-6x+10)=(-3x+13)$

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18. Solve the equation $(2x-1)=(-6)$

(i) $(\frac{-3}{2})$ (ii) $(\frac{-5}{2})$ (iii) $(\frac{-7}{2})$ (iv) -3 (v) $(\frac{-9}{4})$

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19. Which of the following equations is the same as $(-x-4)=0$

(i) $(-x+1)=3$ (ii) $(-x-1)=(-1)$ (iii) $(-x-3)=3$ (iv) $(-x-1)=3$ (v) $(-x-1)=7$

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

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

(v) $(7x-5)=(5x-4)$

21. Which of the following equations is the same as $(-9x+9)=(-x+1)$

(i) $(-9x+7)=(-x-1)$ (ii) $(-9x+7)=(-x-4)$ (iii) $(-9x+7)=(-x+2)$ (iv) $(-9x+12)=(-x-1)$

(v) $(-9x+2)=(-x-1)$

22. Solve the equation $(\frac{7}{6}x+\frac{9}{7})=(-\frac{3}{4})$

(i) $(\frac{-169}{98})$ (ii) $(\frac{-173}{98})$ (iii) $(\frac{-173}{100})$ (iv) $(\frac{-169}{96})$ (v) $(\frac{-171}{98})$

23. In $\triangle ABC$, if $\angle A = 90°$ and $\angle B = \angle C$, find the measure of each of the equal angles of the triangle

(i) 45° (ii) 47° (iii) 44° (iv) 43° (v) 46°

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

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

(v) $(5x+7)=(8x+5)$

25. In a mixture of 315 litres, the ratio of milk and water is 5 : 16. How much water must be added to this mixture to make the ratio 15 : 62?

(i) 70 (ii) 67 (iii) 72 (iv) 71 (v) 69

Assignment Key

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