EduSahara™ Assignment

Name : Word Problems on Linear Equations

Chapter : Simple Linear Equations

Grade : ICSE Grade VIII

1. A student walks from his house to school at 3.15 kmph and arrives 0.40 min late. The next day he walks at 4.51 kmph and reaches the school 17.70 min before time. What is the distance from his house to school?

   (i) 3.14 km (ii) 4.14 km (iii) 5.14 km (iv) 1.14 km (v) 2.14 km

2. A student walks from his house to school at 5.70 kmph and arrives 1.20 min late. The next day he walks at 7.76 kmph and reaches the school 12.20 min before time. At what speed must he travel to reach the school on time?

   (i) 7.84 kmph (ii) 3.84 kmph (iii) 6.84 kmph (iv) 5.84 kmph (v) 4.84 kmph

3. A train crosses a telegraph post in 29.51 sec and a bridge 527.54 m long in 44.89 sec. What is the length of the train?

   (i) 1014.19 m (ii) 1013.19 m (iii) 1012.19 m (iv) 1010.19 m (v) 1011.19 m

4. A train crosses a telegraph post in 17.24 sec and a bridge 1289.44 m long in 46.93 sec. What is the speed of the train?

   (i) 41.43 m/sec (ii) 43.43 m/sec (iii) 42.43 m/sec (iv) 44.43 m/sec (v) 45.43 m/sec

5. A certain number of men can do a work in 12 days.
   If there were 14 men more, it would take 6 days less to complete the work.
   How many men are required to complete the work in 8 days?

   (i) 22 (ii) 23 (iii) 21 (iv) 19 (v) 20

6. Person P is thrice as good a workman as Person Q.
   They can do a work together in $1\frac{1}{2}$ days.
   In how many days Q alone can do the work?

   (i) 9 days (ii) 3 days (iii) 7 days (iv) 5 days (v) 6 days

7. What number must be added to each term of the ratio 30 : 170 to make it 9 : 16 ?

   (i) 149 (ii) 151 (iii) 150 (iv) 153 (v) 147

8. A ratio is equal to 9 : 5. If its antecendent is 1323, what is its consequent?

   (i) 734 (ii) 738 (iii) 733 (iv) 735 (v) 736

9. A ratio is equal to 7 : 1. If its consequent is 720, what is its antecendent?

   (i) 5039 (ii) 5042 (iii) 5040 (iv) 5041 (v) 5038

10. Two numbers are in the ratio 3 : 4. If 20 is added to each number, the ratio becomes 53 : 64. Find the numbers.

    (i) 39 : 52 (ii) 27 : 36 (iii) 33 : 44 (iv) 30 : 40 (v) 36 : 48

11. The ratio of two numbers is
    4 : 2
    and their LCM is 36. Find the numbers.

    (i) 28 : 14 (ii) 44 : 22 (iii) 36 : 18 (iv) 40 : 20 (v) 32 : 16

12. Find the number which bears the same ratio to $\frac{4}{6}$ that $\frac{4}{9}$ does to $\frac{112}{297}$

(i) $\frac{13}{14}$ (ii) $\frac{11}{12}$ (iii) $\frac{9}{14}$ (iv) $\frac{11}{14}$ (v) $\frac{11}{16}$

13. The ages of A and B are in the ratio 7 : 9. 6 years hence, their ages will be in the ratio 4 : 5. Find their present ages.

(i) 42:54 (ii) 35:45 (iii) 28:36 (iv) 56:72

14. The ages of A and B are in the ratio 5 : 8. 6 years ago, their ages were in the ratio 4 : 7. Find their present ages.

(i) 30:48 (ii) 20:32 (iii) 25:40 (iv) 40:64

15. In a mixture of 374 litres, the ratio of milk and water is 5 : 17. How much water must be added to this mixture to make the ratio 17 : 65?

(i) 38 (ii) 37 (iii) 35 (iv) 33 (v) 36

16. The ratio of males to females in a committee of 450 members is 18 : 7. How many more ladies should be added to the committee so that the ratio of males to females is 54 : 29?

(i) 47 (ii) 46 (iii) 50 (iv) 48 (v) 49

17. In an examination, the ratio of passes to failures was 4 : 3.
Had 25 less appeared and 15 less passed, the ratio of passes to failures would have been 29 : 22.
How many students appeared for the examination?

(i) 290 (ii) 280 (iii) 270 (iv) 275 (v) 285

18. In a company, the number of engineers to managers is in the ratio 3 : 1 . After a year, when 5 engineers and 15 managers left, the ratio between engineers to managers is 29 : 7 . Find the number of engineers and managers at the beginning?

(i) 220 (ii) 210 (iii) 190 (iv) 200 (v) 180

19. Two angles of a triangle measure 64° and 50° respectively. Find the measure of the third angle of the triangle

(i) 64° (ii) 68° (iii) 66° (iv) 67° (v) 65°

20. The angles of a triangle ABC are in the ratio 4 : 3 : 5. Find the measure of each angle of the triangle

(i) A=58°,B=47°,C=75° (ii) A=58°,B=45°,C=77° (iii) A=62°,B=45°,C=73° (iv) A=60°,B=45°,C=75°

(v) A=60°,B=43°,C=77°

21. In $\triangle BCD$, if $\angle B = 66°$ and $\angle C = 68°$, find the measure of $\angle D$

(i) D=44° (ii) D=47° (iii) D=46° (iv) D=45° (v) D=48°

22. In $\triangle IJK$, if $\angle I = 70°$ and $\angle J = \angle K$, find the measure of each of the equal angles of the triangle

(i) 56° (ii) 55° (iii) 53° (iv) 57° (v) 54°

23. One angle of a triangle measures 36° and the other two angles are in the ratio 3 : 5. Find these angles.

(i) B=54°,C=90° (ii) B=55°,C=91° (iii) B=52°,C=88° (iv) B=53°,C=89° (v) B=56°,C=92°

24. In a right-angled triangle, the two acute angles are in the ratio 4 : 5. Find these angles.

(i) A=38°,C=48° (ii) A=42°,C=52° (iii) A=39°,C=49° (iv) A=40°,C=50° (v) A=41°,C=51°

25. The speed of a motor boat is 34.97 m/sec and the speed of a stream is 6.56 m/sec. A & B are two location adjacent to a stream. If it takes 240.55 sec to go from point A to B and come back, What is the distance between A and B?

(i) 4057.01 m (ii) 4059.01 m (iii) 4056.01 m (iv) 4060.01 m (v) 4058.01 m

Assignment Key

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