EduSahara™ Assignment

Name : Word Problems on Linear Equations

Chapter : Linear Equations in One Variable

Grade : CBSE Grade VIII

1. Find the missing value in the equation $\_\_\_ : 8 = 30 : 5$

   (i) 51 (ii) 49 (iii) 47 (iv) 48 (v) 45

2. Find the fourth proportional of $24, 6$ and 36

   (i) 9 (ii) 36 (iii) 12 (iv) 6

3. Two numbers are in the ratio 6 : 10. If 16 is added to each number, the ratio becomes 41 : 63. Find the numbers.

   (i) $66:110$ (ii) $60:100$ (iii) $72:120$ (iv) $78:130$ (v) $54:90$

4. Find the number which bears the same ratio to $\frac{5}{6}$ that $\frac{1}{7}$ does to $\frac{25}{63}$

   (i) $\frac{1}{4}$ (ii) $\frac{1}{2}$ (iii) $\frac{3}{10}$ (iv) $\frac{3}{8}$ (v) $\frac{1}{10}$

5. The ages of A and B are in the ratio 10 : 7. 9 years hence, their ages will be in the ratio 11 : 8. Find their present ages.

   (i) $70:49$ (ii) $110:77$ (iii) $90:63$ (iv) $80:56$

6. The ages of A and B are in the ratio 10 : 9. 8 years ago, their ages were in the ratio 9 : 8. Find their present ages.

   (i) $70:63$ (ii) $100:90$ (iii) $60:54$ (iv) $80:72$

7. The ratio of males to females in a committee of 48 members is 1 : 2. How many more ladies should be added to the committee so that the ratio of males to females is 1 : 5?

   (i) 46 (ii) 49 (iii) 48 (iv) 51 (v) 47

8. A motor boat can move at a speed of 16.67 m/sec in still water. If it goes downstream for 65.14 sec, it travels a distance of 1482.00 m. What is the speed of the stream?

   (i) 8.08 m/sec (ii) 4.08 m/sec (iii) 5.08 m/sec (iv) 6.08 m/sec (v) 7.08 m/sec

9. The speed of a motor boat is 17.29 m/sec and the speed of a stream is 9.49 m/sec. A & B are two location adjacent to a stream. If it takes 258.25 sec to go from point A to B and come back, What is the distance between A and B?

   (i) 1561.99 m (ii) 1557.99 m (iii) 1560.99 m (iv) 1558.99 m (v) 1559.99 m

10. A train crosses a telegraph post in 31.22 sec and a bridge 2017.32 m long in 79.69 sec. What is the length of the train?

    (i) 1298.38 m (ii) 1301.38 m (iii) 1300.38 m (iv) 1297.38 m (v) 1299.38 m

11. A train crosses a telegraph post in 10.40 sec and a bridge 548.26 m long in 22.41 sec. What is the speed of the train?

    (i) 46.65 m/sec (ii) 43.65 m/sec (iii) 45.65 m/sec (iv) 44.65 m/sec (v) 47.65 m/sec

12. A can do a work in 3 days. With the help of B, A can do the same work in $1\frac{1}{5}$ days. In how many days can B alone do the work?

(i) 1 day (ii) 0 days (iii) 5 days (iv) 3 days (v) 2 days

13. Due to a leak at the bottom, pipe Y takes $3\frac{3}{8}$ hr to fill the tank. The leak alone can empty the full tank in 27 hr. In what time can pipe Y alone fill the tank when the leak is closed?

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

Assignment Key

1) (iv)	2) (i)	3) (i)	4) (iii)	5) (iii)	6) (iv)
7) (iii)	8) (iv)	9) (v)	10) (v)	11) (iii)	12) (v)
13) (iii)					