

EduSahara™ Learning Center Assignment

Grade : Class VIII, CBSE
Chapter : Linear Equations in One Variable
Name : Word Problems on Linear Equations
Licensed To : Teachers and Students for non-commercial use

1. Find the missing value in the equation ____ : 1 = 9 : 3

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

2. Find the fourth proportional of 30, 5 and 42

(i) 7 (ii) 5 (iii) 42 (iv) 10

3. Two numbers are in the ratio 9 : 17. If 20 is added to each number, the ratio becomes 119 : 207. Find the numbers

(i) 81 : 153 (ii) 99 : 187 (iii) 108 : 204

(iv) 90 : 170 (v) 117 : 221

4. Find the number which bears the same ratio to $\frac{1}{3}$ that $\frac{1}{4}$ does to $\frac{19}{84}$

(i) $\frac{5}{19}$ (ii) $\frac{7}{19}$ (iii) $\frac{1}{3}$ (iv) $\frac{9}{19}$ (v) $\frac{7}{17}$

5. The ages of A and B are in the ratio 2 : 3. 5 years hence, their ages will be in the ratio 7 : 10. Find their present ages

(i) 34 : 51 (ii) 30 : 45 (iii) 26 : 39 (iv) 28 : 42

6. The ages of A and B are in the ratio 8 : 9. 5 years ago, their ages were in the ratio 7 : 8. Find their present ages

(i) 56 : 63 (ii) 24 : 27 (iii) 32 : 36 (iv) 40 : 45

The ratio of males to females in a committee of 460 members is 5 : 18.

7. How many more ladies be added to the committee so that the ratio of males to females is 5 : 22?

(i) 77 (ii) 79 (iii) 81 (iv) 80 (v) 82

8. A motor boat can move at a speed of 6.85 m/sec in still water. If it goes downstream for 476.57 sec, it travels a distance of 4718.00 mt. What is the speed of the stream?

(i) 4.05 m/sec (ii) 5.05 m/sec (iii) 2.05 m/sec (iv) 3.05 m/sec (v) 1.05 m/sec

The speed of a motor boat is 13.90 m/sec and the speed of a stream is 3.90 m/sec. A & B are two locations adjacent to a stream. If it takes 238.17 sec to go from point A to B and come back, What is the distance between A and B?

(i) 1526.97 mt (ii) 1522.97 mt (iii) 1525.97 mt (iv) 1524.97 mt (v) 1523.97 mt

10. A train crosses a telegraph post in 31.43 sec and a bridge 485.08 mt long in 48.45 sec. What is the length of the train?

(i) 896.75 mt (ii) 893.75 mt (iii) 894.75 mt (iv) 897.75 mt (v) 895.75 mt

11. A train crosses a telegraph post in 48.53 sec and a bridge 816.80 mt long in 71.61 sec. What is the speed of the train?

(i) 33.39 m/sec (ii) 37.39 m/sec (iii) 34.39 m/sec (iv) 36.39 m/sec (v) 35.39 m/sec

12. A can do a work in 7 days. With the help of B, A can do the same work in $1\frac{5}{9}$ days. In how many days can B alone do the work?

(i) 2 days (ii) 0 days (iii) 4 days (iv) 1 day (v) 3 days

Due to a leak at the bottom, pipe Y takes 3 hrs to fill the tank.

13. The leak alone can empty the full tank in 6 hrs

In what time can pipe Y alone fill the tank when the leak is closed?

(i) 3 hrs (ii) 2 hrs (iii) 0 hrs (iv) 1 hr (v) 4 hrs

Assignment Key

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