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 $\_\_\_ : 5 = 36 : 9$

   (i) 22 (ii) 20 (iii) 19 (iv) 21 (v) 18

2. Find the fourth proportional of $8, 2$ and 28

   (i) 5 (ii) 9 (iii) 28 (iv) 2 (v) 7

3. Two numbers are in the ratio 6 : 8. If 14 is added to each number, the ratio becomes 37 : 47. Find the numbers.

   (i) $54 : 72$ (ii) $48 : 64$ (iii) $72 : 96$ (iv) $60 : 80$ (v) $66 : 88$

4. Find the number which bears the same ratio to $\frac{1}{7}$ that $\frac{2}{3}$ does to $\frac{4}{21}$

   (i) $\frac{1}{3}$ (ii) $\frac{3}{5}$ (iii) $\frac{2}{3}$ (iv) $\frac{1}{2}$ (v) $\frac{3}{7}$

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

   (i) $77 : 88$ (ii) $56 : 64$ (iii) $63 : 72$ (iv) $49 : 56$

6. The ages of A and B are in the ratio 5 : 3. 5 years ago, their ages were in the ratio 9 : 5. Find their present ages.

   (i) $45 : 27$ (ii) $40 : 24$ (iii) $50 : 30$ (iv) $60 : 36$

7. The ratio of males to females in a committee of 323 members is 15 : 4. How many more ladies should be added to the committee so that the ratio of males to females is 255 : 128?

   (i) 58 (ii) 62 (iii) 61 (iv) 60 (v) 59

8. A motor boat can move at a speed of 27.94 m/sec in still water. If it goes downstream for 54.13 sec, it travels a distance of 1867.00 m. What is the speed of the stream?

   (i) 4.55 m/sec (ii) 8.55 m/sec (iii) 6.55 m/sec (iv) 7.55 m/sec (v) 5.55 m/sec

9. The speed of a motor boat is 23.25 m/sec and the speed of a stream is 13.25 m/sec. A & B are two location adjacent to a stream. If it takes 505.64 sec to go from point A to B and come back, What is the distance between A and B?

   (i) 3967.00 m (ii) 3970.00 m (iii) 3971.00 m (iv) 3969.00 m (v) 3968.00 m

10. A train crosses a telegraph post in 45.76 sec and a bridge 220.11 m long in 58.52 sec. What is the length of the train?

    (i) 789.36 m (ii) 791.36 m (iii) 790.36 m (iv) 788.36 m (v) 787.36 m

11. A train crosses a telegraph post in 24.23 sec and a bridge 1992.65 m long in 73.48 sec. What is the speed of the train?

    (i) 41.46 m/sec (ii) 39.46 m/sec (iii) 38.46 m/sec (iv) 40.46 m/sec (v) 42.46 m/sec

12. A can do a work in 3 days. With the help of B, A can do the same work in 2 days. In how many days can B alone do the work?

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

13. Due to a leak at the bottom, pipe Y takes $5\frac{5}{8}$ hr to fill the tank. The leak alone can empty the full tank in 45 hr. In what time can pipe Y alone fill the tank when the leak is closed?

(i) 2 hr (ii) 4 hr (iii) 8 hr (iv) 5 hr (v) 6 hr

Assignment Key

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