EduSahara™ Assignment

Name : Word Problems on Linear Equations

Chapter : Linear Equations and Simultaneous Linear Equations

Grade : ICSE Grade IX

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1. The speed of a motor boat is 13.10 m/sec and the speed of a stream is 5.34 m/sec. A & B are two location adjacent to a stream. If it takes 901.57 sec to go from point A to B and come back, What is the distance between A and B?

(i) 4925.03 m (ii) 4922.03 m (iii) 4924.03 m (iv) 4923.03 m (v) 4926.03 m

2. A student walks from his house to school at 4.89 kmph and arrives 11.40 min late. The next day he walks at 11.70 kmph and reaches the school 13.80 min before time. What is the distance from his house to school?

(i) 3.53 km (ii) 2.53 km (iii) 5.53 km (iv) 4.53 km (v) 1.53 km

3. A student walks from his house to school at 5.33 kmph and arrives 0.30 min late. The next day he walks at 13.05 kmph and reaches the school 21.30 min before time. At what speed must he travel to reach the school on time?

(i) 7.37 kmph (ii) 4.37 kmph (iii) 5.37 kmph (iv) 6.37 kmph (v) 3.37 kmph

4. A train crosses a telegraph post in 12.85 sec and a bridge 672.80 m long in 40.86 sec. What is the length of the train?

(i) 307.66 m (ii) 308.66 m (iii) 310.66 m (iv) 309.66 m (v) 306.66 m

5. A train crosses a telegraph post in 36.15 sec and a bridge 1736.66 m long in 70.80 sec. What is the speed of the train?

(i) 49.12 m/sec (ii) 51.12 m/sec (iii) 48.12 m/sec (iv) 50.12 m/sec (v) 52.12 m/sec

6. A can do a work in 7 days. With the help of B, A can do the same work in $2\frac{1}{10}$ days. In how many days can B alone do the work?

(i) 3 days (ii) 5 days (iii) 2 days (iv) 1 day (v) 4 days

7. Due to a leak at the bottom, pipe Y takes $11\frac{1}{4}$ 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) 7 hr (ii) 10 hr (iii) 9 hr (iv) 8 hr (v) 11 hr

8. A and B together can do a piece of work in $5\frac{1}{7}$ days.
They work together for 1 day and then A leaves.
B completes the remaining work in $7\frac{1}{4}$ days.
In how much time can each of them do the work seperately?

(i) $(12\text{ days}, 9\text{ days})$ (ii) $(13\text{ days}, 9\text{ days})$ (iii) $(11\text{ days}, 9\text{ days})$ (iv) $(12\text{ days}, 8\text{ days})$ (v) $(12\text{ days}, 10\text{ days})$

A can do $\frac{8}{10}$ of a work in $9\frac{3}{5}$ hr.

9. He works for 4 hr when B joins him.
They work together and complete the work in 4 hr.
In how much time, B alone can do the work?

(i) 11 hr (ii) 9 hr (iii) 12 hr (iv) 13 hr (v) 14 hr

10. Find the fourth proportional of 54, 9 and 18

(i) 3 (ii) 9 (iii) 6 (iv) 18 (v) 0

11. The work done by (6x + 3) men in (x + 1) days and work done by (x + 3) men in (8x + 2) days is in the ratio of 135 : 238 . Find the value of x

(i) 3 (ii) 7 (iii) 1 (iv) 5 (v) 4

12. In an examination, the ratio of passes to failures was 4 : 3.
Had 140 less appeared and 20 less passed, the ratio of passes to failures would have been 5 : 2.
How many students appeared for the examination?

(i) 555 (ii) 550 (iii) 570 (iv) 560 (v) 565

13. In a company, the number of engineers to managers is in the ratio 3 : 1 . After a year, when 15 engineers and 15 managers left, the ratio between engineers to managers is 45 : 13 . Find the number of engineers and managers at the beginning?

(i) 340 (ii) 320 (iii) 300 (iv) 310 (v) 330

14. What number must be added to each term of the ratio 192 : 208 to make it 26 : 27 ?

(i) 222 (ii) 227 (iii) 225 (iv) 223 (v) 224

15. Two numbers are in the ratio 2 : 5. If 20 is added to each number, the ratio becomes 34 : 55. Find the numbers.

(i) 12 : 30 (ii) 14 : 35 (iii) 18 : 45 (iv) 10 : 25 (v) 16 : 40

16. The ratio of two numbers is
5 : 2
and their LCM is 70. Find the numbers.

(i) 45 : 18 (ii) 25 : 10 (iii) 40 : 16 (iv) 30 : 12 (v) 35 : 14

17. Find the number which bears the same ratio to $\frac{1}{7}$ that $\frac{1}{4}$ does to $\frac{1}{24}$

(i) $\frac{6}{7}$ (ii) $\frac{6}{5}$ (iii) $\frac{2}{3}$ (iv) $\frac{4}{7}$ (v) $\frac{8}{7}$

18. The ages of A and B are in the ratio 6 : 5. 10 years hence, their ages will be in the ratio 7 : 6. Find their present ages.

(i) 60 : 50 (ii) 72 : 60 (iii) 54 : 45 (iv) 48 : 40

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

(i) 42 : 36 (ii) 49 : 42 (iii) 56 : 48 (iv) 70 : 60

20. In a mixture of 133 litres, the ratio of milk and water is 3 : 4 . How much water must be added to this mixture to make the ratio 57 : 124 ?

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

21. The ratio of males to females in a committee of 490 members is 17 : 18. How many more ladies should be added to the committee so that the ratio of males to females is 17 : 21?

(i) 45 (ii) 42 (iii) 40 (iv) 43 (v) 41

22. A motor boat can move at a speed of 14.24 m/sec in still water. If it goes upstream for 673.82 sec, it travels a distance of 2291.00 m. What is the speed of the stream?

(i) 11.84 m/sec (ii) 8.84 m/sec (iii) 12.84 m/sec (iv) 10.84 m/sec (v) 9.84 m/sec

23. A motor boat can move at a speed of 7.98 m/sec in still water. If it goes downstream for 78.14 sec, it travels a distance of 1165.00 m. What is the speed of the stream?

(i) 7.93 m/sec (ii) 4.93 m/sec (iii) 8.93 m/sec (iv) 6.93 m/sec (v) 5.93 m/sec

Assignment Key

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

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