EduSahara™ Assignment

Name : Word Problems on Linear Equations

Chapter : Simple Linear Equations

Grade : ICSE Grade VIII

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1. A student walks from his house to school at 5.87 kmph and arrives 5.60 min late. The next day he walks at 11.46 kmph and reaches the school 19.80 min before time. What is the distance from his house to school?

   (i) 3.10 km (ii) 5.10 km (iii) 4.10 km (iv) 6.10 km (v) 7.10 km

2. A student walks from his house to school at 3.22 kmph and arrives 7.10 min late. The next day he walks at 8.90 kmph and reaches the school 19.90 min before time. At what speed must he travel to reach the school on time?

   (i) 4.87 kmph (ii) 3.87 kmph (iii) 1.87 kmph (iv) 5.87 kmph (v) 2.87 kmph

3. A train crosses a telegraph post in 50.32 sec and a bridge 1810.62 m long in 94.46 sec. What is the length of the train?

   (i) 2065.13 m (ii) 2063.13 m (iii) 2064.13 m (iv) 2062.13 m (v) 2066.13 m

4. A train crosses a telegraph post in 12.01 sec and a bridge 878.94 m long in 48.39 sec. What is the speed of the train?

   (i) 22.16 m/sec (ii) 25.16 m/sec (iii) 26.16 m/sec (iv) 23.16 m/sec (v) 24.16 m/sec

5. A certain number of men can do a work in 42 days. If there were 40 men more, it would take 30 days less to complete the work. How many men are required to complete the work in 14 days?

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

6. Person P is four times as good a workman as Person Q. They can do a work together in $6\frac{2}{5}$ days. In how many days Q alone can do the work?

   (i) 33 days (ii) 32 days (iii) 31 days (iv) 35 days (v) 29 days

7. What number must be added to each term of the ratio 20 : 100 to make it 7 : 9 ?

   (i) 263 (ii) 259 (iii) 261 (iv) 260 (v) 258

8. A ratio is equal to 42 : 65. If its antecendent is 504, what is its consequent?

   (i) 778 (ii) 781 (iii) 780 (iv) 782 (v) 779

9. A ratio is equal to 7 : 5. If its consequent is 200, what is its antecendent?

   (i) 281 (ii) 279 (iii) 278 (iv) 283 (v) 280

10. Two numbers are in the ratio 7 : 16. If 14 is added to each number, the ratio becomes 1 : 2. Find the numbers.

    (i) 42 : 96 (ii) 56 : 128 (iii) 35 : 80 (iv) 63 : 144 (v) 49 : 112

11. The ratio of two numbers is 4 : 2 and their LCM is 32. Find the numbers.

    (i) 32 : 16 (ii) 40 : 20 (iii) 28 : 14 (iv) 36 : 18 (v) 24 : 12

12. Find the number which bears the same ratio to $\frac{6}{8}$ that $\frac{2}{8}$ does to $\frac{57}{32}$

(i) $\frac{4}{19}$ (ii) $\frac{2}{17}$ (iii) $\frac{2}{21}$ (iv) 0 (v) $\frac{2}{19}$

13. The ages of A and B are in the ratio 9 : 7. 8 years hence, their ages will be in the ratio 5 : 4. Find their present ages.

(i) 72:56 (ii) 63:49 (iii) 54:42 (iv) 90:70

14. The ages of A and B are in the ratio 5 : 3. 7 years ago, their ages were in the ratio 9 : 5. Find their present ages.

(i) 70:42 (ii) 65:39 (iii) 80:48 (iv) 60:36

15. In a mixture of 350 litres, the ratio of milk and water is 11 : 14. How much water must be added to this mixture to make the ratio 77 : 122?

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

16. The ratio of males to females in a committee of 464 members is 11 : 18. How many more ladies should be added to the committee so that the ratio of males to females is 22 : 43?

(i) 53 (ii) 55 (iii) 57 (iv) 58 (v) 56

17. In an examination, the ratio of passes to failures was 4 : 1.
Had 20 less appeared and 20 less passed, the ratio of passes to failures would have been 10 : 3.
How many students appeared for the examination?

(i) 140 (ii) 155 (iii) 145 (iv) 160 (v) 150

18. In a company, the number of engineers to managers is in the ratio 4 : 1 . After a year, when 15 engineers and 20 managers left, the ratio between engineers to managers is 61 : 12 . Find the number of engineers and managers at the beginning?

(i) 410 (ii) 420 (iii) 380 (iv) 400 (v) 390

19. Two angles of a triangle measure 56° and 50° respectively. Find the measure of the third angle of the triangle

(i) 73° (ii) 72° (iii) 75° (iv) 74° (v) 76°

20. The angles of a triangle ABC are in the ratio 12 : 10 : 38. Find the measure of each angle of the triangle

(i) A=34°,B=32°,C=114° (ii) A=36°,B=28°,C=116° (iii) A=38°,B=30°,C=112°

(iv) A=34°,B=30°,C=116° (v) A=36°,B=30°,C=114°

21. In $\triangle$IJK, if $\angle I = 50°$ and $\angle J = 59°$, find the measure of $\angle K$

(i) K=73° (ii) K=69° (iii) K=72° (iv) K=70° (v) K=71°

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

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

23. One angle of a triangle measures 50° and the other two angles are in the ratio 2 : 11. Find these angles.

(i) B=19°,C=109° (ii) B=21°,C=111° (iii) B=22°,C=112° (iv) B=18°,C=108° (v) B=20°,C=110°

24. In a right-angled triangle, the two acute angles are in the ratio 11 : 7. Find these angles.

(i) A=55°,C=35° (ii) A=57°,C=37° (iii) A=54°,C=34° (iv) A=53°,C=33° (v) A=56°,C=36°

25. The speed of a motor boat is 23.93 m/sec and the speed of a stream is 9.53 m/sec. A & B are two location adjacent to a stream. If it takes 428.61 sec to go from point A to B and come back, What is the distance between A and B?

(i) 4314.97 m (ii) 4315.97 m (iii) 4316.97 m (iv) 4313.97 m (v) 4312.97 m

Assignment Key

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

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