



ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION



Sub: Algebra and Geometry

Class: 7

Date: 27.02.21

Duration: 40 min

Worksheet Solution 13

Full Marks: 15

LINEAR EQUATION IN ONE VARIABLE

Choose the correct option:

1. If 3 is subtracted from seven times a number, the result is 53. Find the number.

- a. 5 b. 6 c. 7 **d. 8**

2. Find two numbers such that one exceeds the other by 11 and their sum is 73.

- a. 41, 32 **b. 31, 42** d. 73, 84 d. 62, 73

3. The sum of three consecutive multiples of 5 is 555. Find the least of the multiples.

- a. 180** b. 185 c. 190 d. 195

4. Three-fourth of a number is more than one-fourth of a number by 2. Find the number.

- a. 2 b. 3 **c. 4** d. 8

5. Divide 22 into two parts in such a way that $\frac{2}{3}$ of one part is equal to $\frac{1}{4}$ of the other.

- a. 6, 16** b. 8, 14 c. 9, 13 d. 10, 12

6. Two numbers are such that the ratio between them is 5 : 2. If each is increased by 1 the ratio between the new numbers so formed is 7 : 3. Find the original number.

- a. 10, 4 **b. 20, 8** c. 40, 16 d. 80, 32

7. Three numbers are in the ratio 2 : 3 : 4 and their sum is 54. Find the least number.

- a. 12** b. 18 c. 24 d. 36

8. The sum of three consecutive even numbers is 54. Find the largest numbers.

- a. 12 **b. 16** c. 24 d. 36

9. Length of rectangle is 4 m less than 3 times its breadth. If the perimeter of rectangle is 32 m. Find its length

- a. 10 m **b. 11 m** c. 14 m d. 16 m

10. The numerator of a fraction is 5 less than the denominator. If 2 is added to both numerator and denominator, it becomes $\frac{4}{5}$. Find the fraction.

- a. $\frac{23}{28}$ b. $\frac{23}{18}$ **c. $\frac{18}{23}$** d. $\frac{18}{25}$

11. The numerator of a fraction is 1 less than the denominator. If numerator is decreased by 2 and denominator is increased by 3, the fraction becomes $\frac{1}{4}$. Find the fraction.

- a. $\frac{3}{4}$ b. $\frac{1}{8}$ **d. $\frac{4}{5}$** d. $\frac{3}{8}$

12. The sum of the digits of a 2 digit number is 8. The number obtained by interchanging the digits exceeds the original number by 18. Find the number

- a. 17 **b. 35** c. 26 d. 44

13. A number consists of two digits whose sum is 5. If 9 is subtracted from the number the digits are reversed. Find the number.

- a. 32** b. 41 d. 50 d. 14

14. A number consists of two-digits. The digit at the units place is 3 times the digit at the tens place. If 36 is added to the number, the digits are reversed. Find the number.

- a. 13 **b. 26** c. 39 d. none of these

15. A boat travels 20 km upstream in a river in the same period of time as it takes to travel 30 km downstream. If the rate of the stream is 4 km/hr, find the speed of boat in still water.

- a. **20 km/hr** b. 24 km/hr c. 25 km/hr d. 30 km/hr