



# ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION



**Sub: Arithmetic**

**Class: 7**

**Date: 12. 05.20**

**Duration: 40 min**

**Worksheet 20**

**Full Marks: 15**

## **RATIO AND PROPORTION**

**Choose the Correct options:**

1. A ratio equivalent to 3 : 7 is:

(i) 3 : 9; (ii) 6 : 10; (iii) 9 : 21; (iv) 18 : 49

2. The ratio 35 : 84 in simplest form is:

(i) 5 : 7; (ii) 7 : 12; (iii) 5 : 12; (iv) none of these

3. In a class there are 20 boys and 15 girls. The ratio of boys to girls is:

(i) 4 : 3; (ii) 3 : 4; (iii) 4 : 5; (iv) none of these

4. Two numbers are in the ratio 7 : 9. If the sum of the numbers is 112, then the larger number is:

(i) 49; (ii) 72; (iii) 63; (iv) 42

5. The ratio of 1.5 m to 10 cm is:

(i) 1 : 15; (ii) 15 : 10; (iii) 10 : 15; (iv) 15 : 1

6. The ratio of 1 hour to 300 seconds is:

(i) 1 : 12; (ii) 12 : 1; (iii) 1 : 5; (iv) 5 : 1

7. In 4 : 7 :: 16 : 28, 7 and 16 are called

(i) extreme terms; (ii) middle terms; (iii) b middle and c extreme term; (iv) none of these

8. The first, second and fourth terms of a proportion are 16, 24 and 54 respectively. Then the third term is:

(i) 36; (ii) 28; (iii) 48; (iv) 32

9. If 12, 21, 72, 126 are in proportion, then:

(i)  $12 \times 21 = 72 \times 126$ ; (ii)  $12 \times 72 = 21 \times 126$ ; (iii)  $12 \times 126 = 21 \times 72$ ; (iv) none of these

10. If x, y and z are in proportion, then:

(i)  $x : y :: z : x$ ; (ii)  $x : y :: y : z$ ; (iii)  $x : y :: z : y$ ; (iv)  $x : z :: y : z$

11. 7 : 12 is equivalent to:

(i) 28 : 40; (ii) 42 : 71; (iii) 72 : 42; (iv) 42 : 72

12. The length and breadth of a rectangle are in the ratio 3 : 1. If the breadth is 7 cm, then the length of the rectangle is:

(i) 14 cm; (ii) 16 cm; (iii) 18 cm; (iv) 21 cm

13. The value of m, if 3, 18, m, 42 are in proportion is:

(i) 6; (ii) 54; (iii) 7; (iv) none of these

14. Length and width of a field are in the ratio 5 : 3. If the width of the field is 42 m then its length is:

(i) 100 m; (ii) 80 m; (iii) 50 m; (iv) 70 m

15. The three numbers are in the ratio  $\frac{1}{2} : \frac{2}{3} : \frac{3}{4}$ . The difference between greatest and smallest numbers is 36. Find the numbers.

(i) 72, 84, 108; (ii) 60, 72, 96; (iii) 72, 84, 96; (iv) 72, 96, 108;