

## ST. LAWRENCE HIGH SCHOOL



Date: 12. 05.20

Full Marks: 15

A JESUIT CHRISTIAN MINORITY INSTITUTION

Sub: Arithmetic Duration: 40 min Class: 7 Worksheet Solutions 20 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

(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 1/2 : 2/3 : 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;