ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION

Sub: Arithmetic **Class: 7** **Date: 11. 05.20**

Duration: 40 min **Worksheet Solution 19** **Full Marks: 15**

PROPORTION

Choose the Correct options:

1. If two quantities are related in such a way that increase in 1 quantity causes increase in other quantity, then this variation is said to be
   a) joint proportion
   b) extreme proportion
   c) direct proportion
   d) inverse proportion

2. If 2 ratios a:b and c:d are equal then we can write it as
   a) a : b⁄c : d
   b) a : b = c : d
   c) a + b = c + d
   d) a : c = d : b

3. A statement which is expressed as an equivalence of two ratios is known as
   a) proportion
   b) variation
   c) ratio
   d) probability

4. If two quantities are related in such a way that when 1 quantity increases, the other quantity decreases, then this variation is said to be
   a) extreme proportion
   b) joint proportion
   c) direct proportion
   d) inverse proportion

5. Symbolically the proportion of a, b, c, d is written as
   a) a : b :: c : d
   b) a + b :: c + d
   c) a + b = c + d
   d) a - b = c - d

6. In a : b = c : d, b and c are called
   a) antecedent
   b) extreme
   c) consequent
   d) mean

7. In ratio a : b, the second term b is called
   a) antecedent
   b) extreme
   c) consequent
   d) mean

8. The relationship between 2 or more proportions is known as
   a) joint proportion
   b) extreme proportion
   c) Compound proportion

d) inverse proportion

9. The fourth proportional to 5, 8, 15 is:
   a) 18
   b) 24
   c) 19
   d) 20

10. If x, y and z are in proportion, then:
   a) x : y : : z : x;
   b) x : y : : y : z;
   c) x : y : : z : y;
   d) x : z : : y : z

11. If a/(b + c) = b/(c + a) = c/(a + b), then each fraction will be equal to,

   a) $(a + b + c)^2$
   b) ½
   c) ¼
   d) 0

12. If a:b = c:d, then the value of $(a^2 + b^2)/(c^2 + d^2)$ is,

   a) ½
   b) (a + b)/(c + d)
   c) (a – b)/(c – d)
   d) ab/cd

13. If a and b are positive integers than √2 always lies between:

   a) (a + b)/(a – b) and ab
   b) a/b and (a + 2b)/(a + b)
   c) a and b
   d) ab/(a + b) and (a – b)/ab

14. The value of m, if 3, 18, m, 42 are in proportion is:
   a) 6;
   b) 54;
   c) 7;
   d) none of these

15. 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:
   a) 100 m;
   b) 80 m;
   c) 50 m;
   d) 70 m