



ST. LAWRENCE HIGH SCHOOL



A Jesuit Christian minority Institution

Subject: Mathematics

Class: X

Date: 22.04.2020

Worksheet-14

Chapter -Ratio and proportion

Topic- Proportion

1. Choose the correct alternative. 1x15=15

- a) If $10:35::x:42$ then value of x is i) 24 ii) 36 iii) 12 iv) none of these
- b) If $6:x::2:13$ then value of x is i) 39 ii) 13 iii) 17 iv) none of these
- c) If $2a, 3b, 6ac$ and $9bc$ are in proportion then i) $2a \times 9bc = 3b \times 6ac$ ii) $2a \times 3b = 6ac \times 9bc$ iii) $2a \times 6ac = 3b \times 9bc$ iv) none of these
- d) The fourth proportional of 6,9, 12 is i) 9 ii) 20 iii) 18 iv) none of these
- e) what is the number to be added with 2,4,6 and 10 to get the result in proportion ?
i) 2 ii) 3 iii) 4 iv) none of these
- f) The third proportional of 9 and 15 is i) 20 ii) 25 iii) 18 iv) none of these
- g) The third proportional of $2a^2$ and $3ab$ is i) $\frac{9b^2}{2}$ ii) $\frac{2}{9b^2}$ iii) $9b^2$ iv) none of these
- h) Mean proportional of $\frac{1}{12}$ and $\frac{1}{75}$ is i) 30 ii) $\frac{1}{900}$ iii) $\frac{1}{30}$ iv) none of these

i) Mean proportional of pqr and $\frac{pr}{q}$ is i) pr ii) p^2q^2 iii) pqr iv) none of these

j) Fourth proportional of $\frac{1}{3}$, $\frac{1}{4}$ and $\frac{1}{5}$ is i) $\frac{20}{3}$ ii) $\frac{3}{20}$ iii) 20 iv) none of these

k) If $8:y::2:21$ then value of y is i) 84 ii) 48 iii) 42 iv) none of these

l) Third proportional of $9pq$ and $12pq^2$ is i) $16pq^3$ ii) $16p^2q^2$ iii) $16pq$ iv) none of these

m) If $x:50::3:2$ then value of x is i) 100 ii) 75 iii) 25 iv) none of these

n) Mean proportional of 8.1 and 2.5 is i) 4.5 ii) 9 iii) 5.5 iv) none of these

o) $23, 30, 57$ and 78 - what number is to be subtracted from each to get the result in proportion?

i) 7 ii) 8 iii) 6 iv) none of these

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