Apply and Evaluate

Q.1 Men, women and children together are 60. The amounts given to all men, women and children are in the ratio 5 : 4 : 3. The ratio of the amount received by one man, one woman and one child is 3 : 2 : 1. Find out number of men?

Q.2 a, b, c are the sides of a triangle ABC. (a+b) : (b+c) : (c+a) = 7 : 8 :9, Then show that triangle ABC is a right angled triangle.

Q.3 The larger base of an isosceles trapezium is equal to its diagonal and smaller base equal to its altitude. Find the ratio of parallel sides (larger base : smaller base)

Q.4 The sum of the first n th terms of two A.P. are in the ratio (3n+3) : (5n-3), Find the ratio of their 10 th terms.

Q.5 A vessel is filled completely with water. 27 lit of water is removed and some quantity of milk is added to the vessel. Again 27 lit of mixture is removed and some quantity of milk is added to it. Now the ratio of milk to water is 9 : 16. Find the capacity of the vessel.**Q.6** Divide Rs. 2324 among three children in the ratio $1\frac{1}{4} : 1\frac{1}{3} : \frac{7}{8}$

Q.7 Divide Rs.370 into three parts such that second part is $\frac{1}{4}$ of the third part and the ratio between first and the third part is 3 : 5, Find each part.

Q.8 Set up all possible proportions from the numbers 8, 12, 20, 30.

Q.9 Find two numbers having their sum, difference and product are in the ratio 5 : 1 : 36

Q.10. $\frac{a}{b} = \frac{7}{8}$ then find $\frac{\sqrt{ab}}{a+b}$

Q.11. Draw a segment of the length $\sqrt{65}$ cm