



Grade 8

Mathematics

Unit : 16 - Ratio

## Part I

1) Fill in the blanks.

1)  $36 : 48 = \square : 4$

2)  $14 : \square = 2 : 3$

3)  $5 : 6 = 30 : \square$

2) Write the ratio between length and breadth of the rectangle.



3) Join the ratio in column A to the equivalent ratio in column B.

A	B
4 : 3	2 : 3
10 : 15	16 : 12
3 : 5 : 7	24 : 36
2 : 3	24 : 40 : 56

4) Write two equivalent ratios.

a)  $9 : 6 : 3$

b)  $8 : 2 : 4$

5) Supuni, Nipuni and Kasuni are friends. The ratio of their heights is  $4 : 6 : 7$ . If Supuni's height 135 cm. Calculate the height of Nipuni and Kasuni.

## Part II

- 1) The floor area of the kitchen of a house is  $\frac{3}{4}$  the floor area of the sitting room.
- What is the ratio of the area of kitchen and sitting room.
  - What fraction of the total floor area of the kitchen and the sitting room is the difference between the floor areas of these two rooms?

- 2) Gayan and Damith started a business in the same year. Fill in the blanks in the following table.

Name	Amount invested	Date of investment	Period of investment	Amount x period
Gayan	Rs. 20,000	Jan 01		
Damith	Rs. 25,000	March 01		

- 3) P started a business on 1<sup>st</sup> of January by investing Rs. 20000. After 2 months Q joined to the business by investing Rs. 30000. After 4 months R joined to the business by investing Rs. 40,000. Profit from the business for the year was Rs. 65,000.

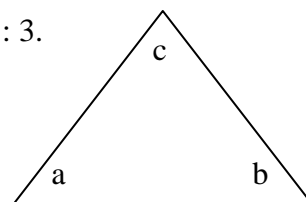
- Find the ratio of investing money.
- Who gained more profit.

- 4) In a certain village Sinhalese, Tamil and Muslims live together. The ratio of Sinhala to Tamil 5 : 3 and the ratio of Tamil to Muslim is 4 : 1.

- Find the ratio of Sinhala to Tamil to Muslims.
- How many families are there in the village if there are 120 Sinhala families.

- 5) Ratio of the magnitude of angle a and b is 1 : 2. angle a and c is 2 : 3.

- Build up the ratio between a, b, c
- Find the magnitude of a, b, c



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