



Week 11

YEAR 09

SUBJECT: MATHEMATICS**NAME OF STUDENT:** _____

STRAND	<i>SOCIAL MATHEMATICS</i>
SUB-STRAND	<i>Money, Ratio and Proportion</i>
Content Learning Outcome	➤ Introduce ratios, proportions, percentages and rates and to apply these in everyday situations

RatioObjective:

- Define ratio
- Calculate ratio of two items in its simplest forms

Ratio : is the division of two quantities with the same unit

- It is often expressed as a fraction or may also be expressed with a colon which is in the form of ***a: b***.
- The ration must be in its simplest form.

Example 1

In a class of 40 students, there are 16 boys and 24 girls. Write the ratio of boys to girls.

16 boys and 24 girls = 16 : 24

$$= \frac{16}{8} : \frac{24}{8}$$

$$= 2 : 3$$

Example 2

The ratio of Physics students to Geography students at Vuniniu Secondary School is 3: 5. If 20 students are taking Geography, how many students are taking Physics?

Represent physics students as p

Physics: Geography

$$3: 5 = p: 20$$

$$\frac{3}{5} = \frac{p}{20}$$

$$3 \times 20 = p \times 5$$

$$60 = 5p$$

$$12 = p$$

Therefore 12 students are taking physics

ACTIVITY

1. Express the following in their simplest ratios

(a) 20 : 12

(b) 25 : 12

(c) 10 : 20

(3 m)

2. Divide \$300.00 in the following ratios

(a) 1 : 2

(b) 2 : 3

(c) 1 : 5

(3 m)

2. Divide the following in the ratio 2 : 3.

(a) \$50.00

(b) 80 coconuts

(c) 75 litres of petrol

(3 m)