



# 3055 BA SANGAM COLLEGE

PH: 6674003/9264117 E-mail: basangam@connect.com.fj



## WORKSHEET 13 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

### Proportion

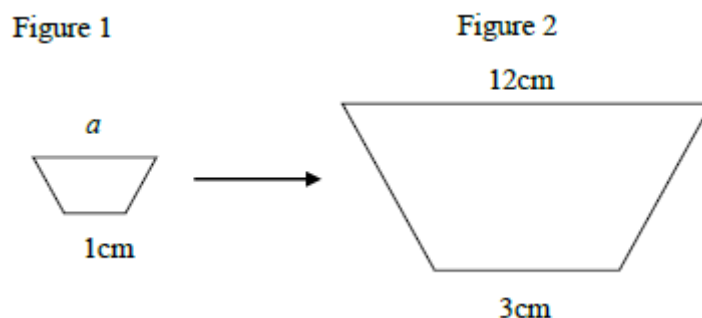
#### Objective:

- Define Proportion
- Calculate Proportions

**Proportion** is the comparing and equating of two ratios

#### Example 1

Figure 1 is enlarged to Figure 2. Work out the length of the side marked a.



$$\frac{1}{a} = \frac{3}{12}$$

$$A \times 3 = 1 \times 12$$

$$3a = 12$$

$$A = 4$$

#### Example 2

Two men made an investment in a business. Mr. Peters contributed \$10,000.00 and Mr. Thomas contributed \$6,000.00.

- Express the two men's contributions as ratio in its simplest form.
- If they were going to share the profit using the above ratio, how much would each man receive if their profit was \$ 9,000.00?

[ Answer ]

$$\begin{aligned} \text{(a) Mr. Peters : Mr. Thomas} &= 10000.00 : 6000.00 \\ &= 10 : 6 \quad (\text{Divide by 1000}) \\ &= 5 : 3 \quad (\text{Divide by 2}) \end{aligned}$$

$$\begin{aligned} \text{(a) Mr. Peters share is} &= \frac{5}{8} \times \$9000 = \mathbf{\$5625} \\ \text{Mr. Thomas share is} &= \frac{3}{8} \times \$9000 = \mathbf{\$3375} \end{aligned}$$

### Exercise 1

A square of length 6 cm was enlarged to 15cm. By what ratio was it increased?

(2 Marks)

### Exercise 2

Two business men Mr. A and Mr. B invested a total of \$10, 000.00 in a business. The ratio of the amount of their contributions was 3: 1. How much did Mr. B invest?

(2 Marks)

THE END