

O Level E Maths Tutorial 2: Ratio and proportion

Syllabus :

- ratios involving rational numbers
-

1. Tom and Jerry splits 12 cakes in the ratio 5:1. Tom gets the bigger share. How many cakes does Jerry get?

-
- writing a ratio in its simplest form
-

2. Write each of these ratios in its simplest form.

- (i) 2:4
- (ii) 6:9
- (iii) 5:20

-
- map scales (distance and area)
-

3. Mary wanted to look up the size of MacRitchie Reservoir on a map.



Figure 2-1

The scale of the map is 1 : 25 000. She used a ruler and found that the line L of the reservoir is about 10 cm on the map. What is the actual length L?

• direct and inverse proportion

4. (i) A number p is directly proportional to q . If $p = 2$, $q = 5$. Find q when $p = 6$.

(ii) A number y is inversely proportional to x . When $x = 3$, $y = 6$. Find y when $x = 6$.

5. John drives from town A to town B at a speed of 40 km/h. From the distance on his map, he estimates that he can get there in 1 hour. If he can double his speed, how long would it take him to get there?