## 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.

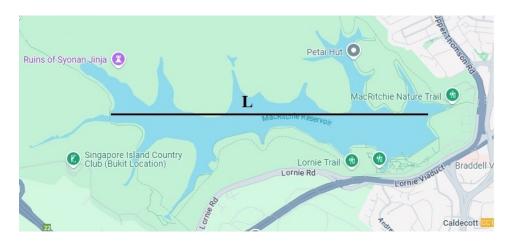


Figure 2-1

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?

## Dr Hock's Maths Tuition

• 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?