

NICKS & TRICKS

GUIDE TO 1st YEAR MATHS

Co-ordinate Geometry & Area – Part 2

Always Remember!

1. Slope & Formula

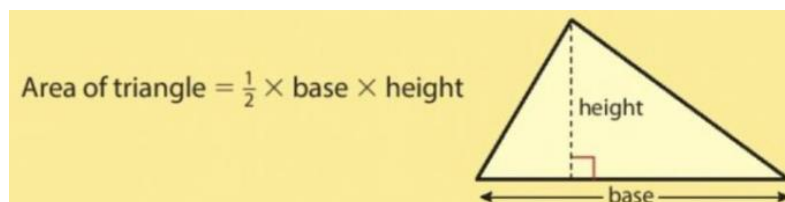
$$\text{Slope} = \frac{\text{Rise}}{\text{Run}}$$



$$\frac{y_2 - y_1}{x_2 - x_1}$$

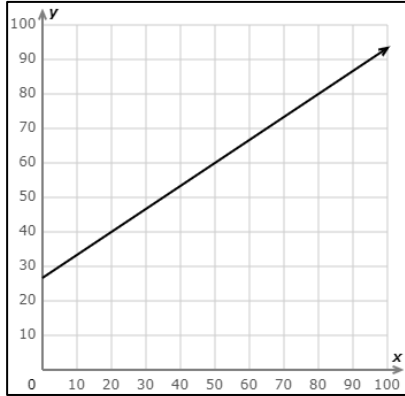
2. Area

$$\text{Area} = \text{Length} \times \text{width}$$



Worked Example

Look at this graph:



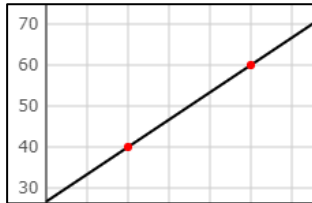
What is the slope?

Simplify your answer and write it as a proper fraction, improper fraction, or integer.

$$\frac{y_2 - y_1}{x_2 - x_1}$$

remember the slope formula

Find any two points on the line.



Two points on the line are (20, 40) and (50, 60). Put those points into the slope formula.

$$\left(\frac{60 - 40}{50 - 20}\right)$$

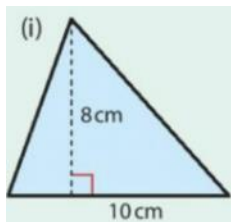
$$\left(\frac{20}{30}\right) = \left(\frac{2}{3}\right)$$

The slope is $\left(\frac{2}{3}\right)$

3 Questions – 15 mins – Time yourself!

Question 1:

Find the area of this triangle.



Question 2:

A tortoise moves 8 mm every second.
How many metres will it travel in one hour?

Question 3:

Susan's bedroom wall is 3 metres long.
Can she fit all of these units along the wall?
Give a reason for your answer.

