

# Need to Know: Maths Term 2 Year 9 Foundation

The Numbers in **Red** are topics that have already been covered in either KS3 or KS4 and are being revisited to help the students to move onto more complicated topics. The numbers in **blue** are the GCSE grade of the work being covered. In **Green** are the Mathsgenie reference which can be used for further revision and questions to try [www.mathsgenie.co.uk](http://www.mathsgenie.co.uk)

Part 6 4-5 hours		
<b>Rounding whole numbers</b>	<b>1</b>	<b>MG 1/2</b>
<b>Rounding decimals</b>	<b>1-2</b>	<b>MG 1/2</b>
<b>Approximating</b>	<b>2</b>	<b>MG 1/2</b>

Part 7 16 hours		
<b>Multiplying and dividing decimals</b>	<b>2</b>	<b>MG 1/2</b>
<b>Converting between fractions and decimals and reciprocal</b>	<b>1-2</b>	<b>MG 1/2</b>
<b>Expressing as a fraction</b>	<b>1</b>	<b>MG 1/2</b>
<b>Four operations (x ÷ + -) with fractions</b>	<b>3</b>	<b>MG 4</b>
Working with fractions on a calculator	<b>1-2</b>	

Part 8 8 hours		
Drawing linear graphs from an equation and using a table of value	<b>3</b>	<b>MG 3</b>
Gradient, working out and drawing	<b>5</b>	<b>MG 5</b>
$y=mx+c$ , drawing a line and writing an equation for a line	<b>5</b>	<b>MG 5</b>
Parallel lines	<b>5</b>	<b>MG 5</b>
Real life graphs	<b>3</b>	

## Key Words

- Significant figure: a type of rounding based on the size of the number
- Approximate/estimate: working out a rough answer after rounding the numbers in the question

## Key Words

- Terminating decimal: A decimal that stops, e.g.  $0.125 = \frac{3}{8}$
- Recurring decimal: A decimal that keeps going, e.g.  $0.333333333333 = \frac{1}{3}$
- Reciprocal: One number is a reciprocal of another if when you multiply them together the answer is 1. E.g.  $\frac{1}{4}$  and 4 are the reciprocal of each other.

## Key Words

- Linear: Straight
- Flow diagram: Input numbers, follow rules and get an output
- Horizontal: Straight line that goes across, like the horizon
- Vertical: straight line that goes up/down
- Table of values: where you put the in outs and out outs to help draw the graph.
- Origin: centre of your axes, or the point (0,0)
- Gradient: a measure of how steep a line is.
- $y=mx+c$ : a common way to write the equation of a line.  $m$  is the gradient.  $C$  is where the graph crosses the  $y$  axis, often known as the  $y$  intercept.
- Parallel: two lines with the same gradient that will never cross