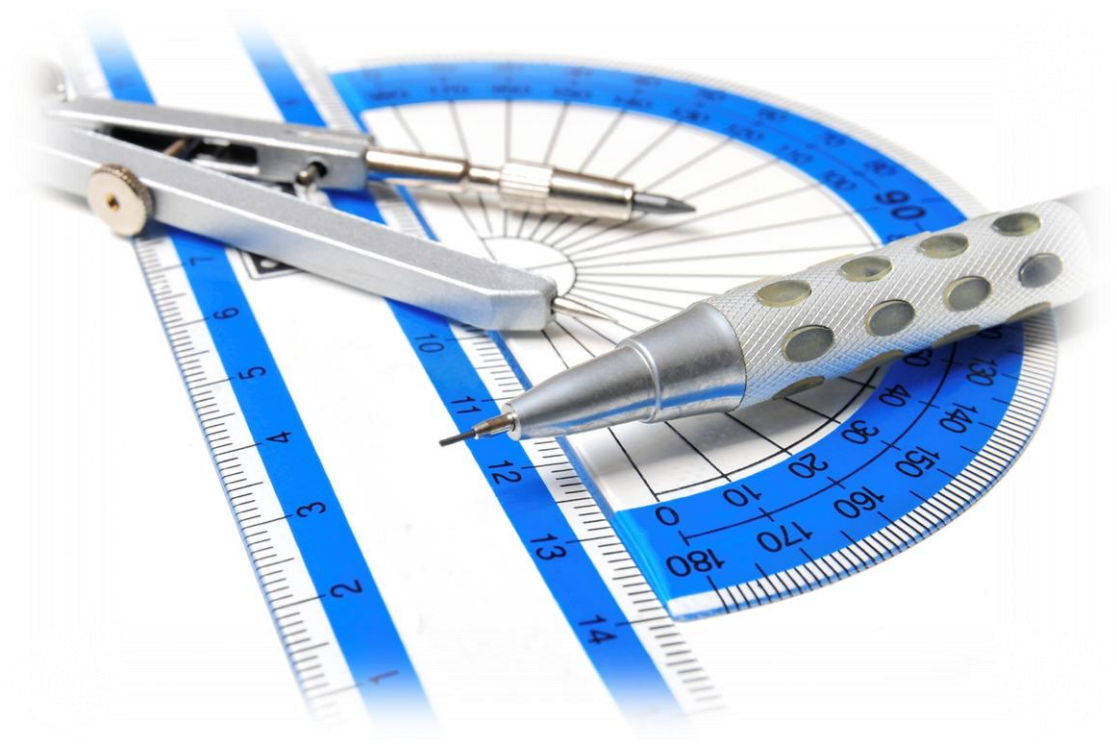


Achieve Your Target Grade In GCSE Maths In Four Weeks

GCSE Maths Master Shortcuts



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Dividing a number by 4

Method: Half the number and half it again.

Dividing a number by 5

Method: Divide the number by 10 (move the decimal point one place to the left) and then double it.

Dividing a number by 8

Method: Half the number. Half it again and half it one last time.

Find a common multiple of a list of numbers

Method: Easy! Just multiply all the numbers!

Example: Find a common multiple of 3, 4 & 5?

Answer: Multiply all of them $\rightarrow 3 \times 4 \times 5 = 60$.
60 is a common multiple because as you can see all three numbers go into 60.

Note: This is not always the lowest common multiple (LCM)

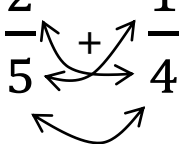
When will I need this:

You will need this when you're finding a common denominator to add/subtract/order fractions. If you're unsure, you'll know how to quickly find it.

Adding/subtracting fractions by cross multiplying

Method: Once you have found the common denominator (see previous section), simply cross multiply and then add/subtract.

Example: $\frac{2}{5} + \frac{1}{4}$

Answer:
$$\begin{array}{ccc} 8 & & 5 \\ \frac{2}{5} & + & \frac{1}{4} = \frac{13}{20} \end{array}$$

20 (Common multiple)

Example 2:
$$\begin{array}{ccc} 10 & 6 & \\ \frac{2}{3} - \frac{3}{5} = \frac{4}{15} \end{array}$$