Fractions (Back to Basics Maths)

Addition, subtraction method:

$$\frac{3}{10} + \frac{4}{5} = \times \quad \text{cannot do} \qquad \text{Solution? Make denominator the same}$$

$$\frac{3}{10} + \frac{4}{5} \times 2 = \frac{3}{10} + \frac{8}{10} = \frac{3+8}{10} = \frac{11}{10} = 1\frac{1}{10} \quad \text{Answer}$$

SAME

$$\frac{7}{15} - \frac{2}{5} = \times \quad \text{cannot do}$$

$$\frac{7}{15} - \frac{2}{5} \times 3 = \frac{7}{15} - \frac{6}{15} = \frac{1}{15} \quad \text{Answer}$$

SAME

Multiplication method:

$$\frac{8}{3} \times \frac{9}{11} = \frac{8 \times 9}{3 \times 11} = \frac{72}{33} \xrightarrow[\div 3]{simplify} \frac{24}{11} = 2\frac{2}{11} \quad \text{Answer}$$

EASY METHOD!

Division method:

$$\frac{3}{12} \div \frac{2}{3} = \quad \times \quad \text{easier way to do this}$$

FLIP one fraction and multiply instead.

$$\frac{3}{12} \times \frac{3}{2} \overset{\text{Flipped}}{=} \frac{3 \times 3}{12 \times 2} = \frac{9}{24} \xrightarrow[\div 3]{\text{simplify}} \boxed{\frac{3}{8}} \quad \text{Answer!}$$

Practice makes perfect! Try the problems below:

GCSE Maths practice booklet – http://www.mathedup.co.uk/wp-content/uploads/2015/03/27_fractions_adding_subtracting_multiplying-and-dividing2.pdf

Solutions to the above - http://www.mathedup.co.uk/wp-content/uploads/2014/05/27.pdf