Fractions
(Back to Basics Mental Maths)

Addition, subtraction method:

$$\frac{3}{10} + \frac{4}{5} = \ \textcolor{red}{\times} \ \textcolor{red}{cannot \ do!}$$

Solution? Make denominator the same eg 10

$$\frac{3}{10} + \frac{4\times2}{5\times2} = \frac{3}{10} + \frac{8}{10} = \frac{3+8}{10} = \frac{11}{10} = \boxed{1\frac{1}{10}} \ \text{Answer}$$

SAME

$$\frac{7}{15} - \frac{2}{5} = \ \textcolor{red}{\times} \ \textcolor{red}{cannot \ do}$$

$$\frac{7}{15} - \frac{2\times3}{5\times3} = \frac{7}{15} - \frac{6}{15} = \frac{7-6}{15} = \boxed{\frac{1}{15}} \ \text{Answer}$$

SAME

Multiplication method:

$$\frac{8}{3} \times \frac{9}{11} = \frac{8\times9}{3\times11} = \frac{72}{33} \xrightarrow[\div 3]{simplify} \frac{24}{11} = \boxed{2\frac{2}{11}} \ \text{Answer}$$

EASY METHOD!

Fractions
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Division method:

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

FLIP the SECOND Fraction and Multiply instead.

$$\frac{3}{12} \times \frac{3}{2} \underset{\text{Flipped}}{} = \frac{3 \times 3}{12 \times 2} = \frac{9}{24} \xrightarrow[\div 3]{\text{Simplify}} \left(\frac{3}{8}\right) \text{Answer!}$$

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