

## Simplifying Fractions to Lowest Terms

To put a fraction into lowest terms, use the following steps:

① Find the GCF (greatest common factor).

eg)  $\frac{21}{24}$

$$\begin{array}{l} 21 \\ \textcircled{1} \times 21 \\ \textcircled{3} \times 7 \end{array}$$

$$\begin{array}{l} 24 \\ \textcircled{1} \times 24 \\ 2 \times 12 \\ \textcircled{3} \times 8 \\ 4 \times 6 \end{array}$$

GCF  $\rightarrow$  3

② Divide both the numerator and the denominator by the GCF.

ie)  $\frac{21 \div 3}{24 \div 3} = \frac{7}{8}$

③ To check that the fraction is in lowest terms, see if the numerator and denominator of the simplified fraction have any common factors other than 1.

ie)  $\frac{7}{8}$

$$\frac{7}{1 \times 7}$$

$$\frac{8}{1 \times 8} \\ 2 \times 4$$

No common factors so you know your fraction is in simplest terms.

Finally, with larger numbers you may need to break it down into more than one step.

eg)  $\frac{100}{120} \stackrel{\div 10}{=} \frac{10}{12} \stackrel{\div 2}{=} \frac{5}{6}$