

Wednesday 10th June 2020

Adding two fractions by first finding the lowest common denominator (LCD)

Steps to success

Example:

$$\begin{array}{r} 5 \\ \hline 8 \end{array} + \begin{array}{r} 4 \\ \hline 7 \end{array}$$

↓ ↓
Denominators

1. Multiply the denominators together to find the LCD e.g. $8 \times 7 = 56$
2. Convert the first fraction into the LCD. E.g. How many 56ths are 5 eighths? We already multiplied 8×7 in step one— remember we need to do the same to the top as we've done to the bottom—so $5 \times 7 = 35$. The first would be $35/56$
3. Convert the second fraction into 56ths. Remember we multiplied the 7 by 8 to get 56. So we need to multiply the 4 by 8 (do the same to the bottom as we do to the top. We would have $32/56$.
4. Finally we would add $35/56$ and $32/56$. This would be $67/56$ which is an improper fraction or 1 and $11/56$

Find the total for each pair of fractions below:

<u>Fractions</u>	<u>Working out</u>	<u>Total</u>
$\frac{2}{10} + \frac{3}{4}$		
$\frac{3}{5} + \frac{1}{3}$		
$\frac{1}{10} + \frac{2}{5}$		
$\frac{3}{5} + \frac{2}{2}$		
$\frac{3}{10} + \frac{1}{4}$		
$\frac{1}{3} + \frac{1}{8}$		
$\frac{1}{10} + \frac{1}{2}$		