

Thursday 11th June 2020

Subtracting two fractions by finding the lowest common denominator (LCD)

Steps to success

Example:

$$\begin{array}{r} 2 \\ \hline 5 \end{array} - \begin{array}{r} 1 \\ \hline 3 \end{array}$$

↓ ↓
Denominators

1. Multiply the denominators together to find the LCD e.g. $5 \times 3 = 15$. Before moving on check to see if either of the numbers have any common factors– both 5 and 3 are prime numbers so have no common factors so 15 would be the LCD.

2. Convert the first fraction into the LCD. E.g. How many 15ths are two fifths? We already multiplied 5×3 in step one– remember we need to do the same to the top as we've done to the bottom–so $2 \times 3 = 6$. The first would be $6/15$

3. Convert the second fraction into 15ths. Remember we multiplied the 3 by 5 to get 15. So we need to multiply the 1 by 5 (do the same to the bottom as we do to the top). We would have $5/15$

4. Finally we would calculate: $\frac{6}{15} - \frac{5}{15} = \frac{1}{15}$

Find the answer for the subtraction questions below:

<u>Fractions</u>	<u>Working out</u>	<u>Answer</u>
$\frac{3}{4} - \frac{2}{10}$		_____
$\frac{3}{5} - \frac{1}{3}$		_____
$\frac{2}{5} - \frac{1}{10}$		_____
$\frac{2}{2} - \frac{3}{5}$		_____
$\frac{3}{10} - \frac{1}{4}$		_____
$\frac{1}{3} - \frac{1}{8}$		_____
$\frac{1}{2} - \frac{1}{10}$		_____