

## Finding the Least Common Multiple of Two Numbers

LCD 1

**Instructions:** For each pair of numbers, fill in a row of the multiples chart by multiplying by 1, 2, 3, 4, etc. As soon as you find a common multiple, circle it. The circled number is the Least Common Multiple (or LCM). You do **not** need to fill up the whole table.

**1** 2 and 3

	x1	x2	x3	x4	x5	x6
2	2	4	6			
3	3	6				

**2** 3 and 4

	x1	x2	x3	x4	x5	x6

**3** 2 and 10

	x1	x2	x3	x4	x5	x6

**4** 8 and 10

	x1	x2	x3	x4	x5	x6

**5** 4 and 5

	x1	x2	x3	x4	x5	x6

**6** 4 and 6

	x1	x2	x3	x4	x5	x6

**7** 6 and 8

	x1	x2	x3	x4	x5	x6

**8** 3 and 5

	x1	x2	x3	x4	x5	x6

**9** 12 and 15

	x1	x2	x3	x4	x5	x6

**10** 6 and 21

	x1	x2	x3	x4	x5	x6	x7

## Finding the Least Common Denominator (LCD)

LCD 2

**Instructions:** Change these 'un-like' fractions into 'like' fractions using the LCD method. Use the multiples table to help find the LCM of the bottom numbers.

**1**       $\frac{3}{4}$        $\frac{1}{6}$       4 and 6

$\frac{3}{3} \times \frac{3}{4}$        $\frac{1}{6} \times \frac{2}{2}$

$\frac{9}{12}$        $\frac{2}{12}$

x1	x2	x3	x4	x5	x6
4	8	12			
6	12				

LCM becomes the LCD

**2**       $\frac{1}{2}$        $\frac{7}{10}$       2 and 10

— ×  $\frac{1}{2}$        $\frac{7}{10}$  × —

x1	x2	x3	x4	x5	x6

**3**       $\frac{5}{6}$        $\frac{3}{8}$       6 and 8

— ×  $\frac{5}{6}$        $\frac{3}{8}$  × —

x1	x2	x3	x4	x5	x6

**4**       $\frac{3}{10}$        $\frac{3}{8}$       10 and 8

— ×  $\frac{3}{10}$        $\frac{3}{8}$  × —

x1	x2	x3	x4	x5	x6

## Adding & Subtracting Fractions by the LCD Method

LCD 3

**Instructions:** Add or subtract these 'un-like' fractions. Start by using the LCD Method to turn them into 'like' fractions. You do **not** need to simplify your answers.

**1**      $\frac{2}{3} + \frac{7}{9}$

$$\frac{3}{3} \times \frac{2}{3} + \frac{7}{9} \times \frac{1}{1}$$

$$\frac{6}{9} + \frac{7}{9} = \frac{13}{9}$$

3 and 9

x1	x2	x3	x4	x5	x6
3	6	9			
9					

**2**      $\frac{4}{9} + \frac{1}{12}$

$$\text{---} \times \frac{4}{9} + \frac{1}{12} \times \text{---}$$

$$\text{---} + \text{---} = \text{---}$$

9 and 12

x1	x2	x3	x4	x5	x6

**3**      $\frac{7}{12} - \frac{4}{15}$

$$\text{---} \times \frac{7}{12} - \frac{4}{15} \times \text{---}$$

$$\text{---} - \text{---} = \text{---}$$

12 and 15

x1	x2	x3	x4	x5	x6

**4**      $\frac{3}{6} - \frac{3}{14}$

$$\text{---} \times \frac{3}{6} - \frac{3}{14} \times \text{---}$$

$$\text{---} - \text{---} = \text{---}$$

6 and 14

x1	x2	x3	x4	x5	x6	x7

## When 'Un-Like' Denominators are Multiples

LCD 4

**Instructions:** Add these 'un-like' fractions using the LCD method. In each problem, one bottom number is a multiple of the other. That means you won't need a table to find the LCM because the bigger bottom number is the LCM. You do **not** need to simplify your answers.

**1**  $\frac{1}{2} + \frac{5}{6}$

$\frac{3}{3} \times \frac{1}{2} + \frac{5}{6}$

$\frac{3}{6} + \frac{5}{6} = \frac{8}{6}$

**2**  $\frac{1}{8} + \frac{3}{4}$

$\frac{1}{8} + \frac{3}{4} \times \text{---}$

--- + --- = ---

**3**  $\frac{2}{3} + \frac{2}{9}$

---  $\times \frac{2}{3} + \frac{2}{9}$

--- + --- = ---

**4**  $\frac{5}{12} + \frac{2}{6}$

$\frac{5}{12} + \frac{2}{6} \times \text{---}$

--- + --- = ---

**5**  $\frac{3}{4} + \frac{5}{16}$

---  $\times \frac{3}{4} + \frac{5}{16}$

--- + --- = ---

**6**  $\frac{9}{25} + \frac{3}{5}$

$\frac{9}{25} + \frac{3}{5} \times \text{---}$

--- + --- = ---

**7**  $\frac{4}{3} + \frac{8}{15}$

---  $\times \frac{4}{3} + \frac{8}{15}$

--- + --- = ---

**8**  $\frac{5}{21} + \frac{2}{3}$

$\frac{5}{21} + \frac{2}{3} \times \text{---}$

--- + --- = ---

## Un-Guided Practice with the LCD Method

LCD 5

**Instructions:** Add or subtract these 'un-like' fractions using the LCD method you learned in the video. Show your work and you do **not** need to simplify your answers.

1  $\frac{2}{3} + \frac{1}{6}$

$\frac{2}{2} \times \frac{2}{3} + \frac{1}{6}$

$\frac{4}{6} + \frac{1}{6} = \left(\frac{5}{6}\right)$

2  $\frac{7}{12} - \frac{1}{6}$

3  $\frac{15}{24} + \frac{5}{8}$

4  $\frac{9}{10} - \frac{1}{5}$

5  $\frac{3}{8} + \frac{3}{2}$

6  $\frac{3}{7} + \frac{5}{14}$

7  $\frac{5}{3} - \frac{3}{4}$

8  $\frac{4}{6} - \frac{3}{8}$

## Un-Guided Practice with the LCD Method - Set 2

LCD 6

**Instructions:** Add or subtract these 'un-like' fractions using the LCD method you learned in the video. Show your work and you do **not** need to simplify your answers.

1  $\frac{1}{2} + \frac{3}{14}$

2  $\frac{16}{30} + \frac{1}{10}$

$\frac{7}{7} \times \frac{1}{2} + \frac{3}{14}$

$\frac{7}{14} + \frac{3}{14} = \left(\frac{10}{14}\right)$

3  $\frac{7}{16} - \frac{1}{4}$

4  $\frac{8}{11} - \frac{5}{22}$

5  $\frac{4}{5} + \frac{2}{3}$

6  $\frac{5}{6} - \frac{4}{30}$

7  $\frac{5}{9} - \frac{10}{27}$

8  $\frac{7}{9} - \frac{5}{12}$