

# Fractions with Different Denominators

$$\frac{3}{5}$$

← numerator  
← denominator

**Multiple-** the product of any given whole number and another whole number.

**EX-** 12 is a multiple of 6 because  $6 \times 2 = 12$

## Finding the Common Denominators

1. List multiples for both numbers
2. Circle the first multiple both numbers have in common
  - a. This number is the **L**east **C**ommon **M**ultiple (**LCM**)

3: 3, 6, 9, 12, **15**, 18

5: 5, 10, **15**, 20, 25, 30

**LCM: 15**

## Example:

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

$$\frac{2}{3} \times \frac{\quad}{\quad} = \frac{\quad}{15}$$

$$\frac{2}{3} \times \frac{5}{5} = \frac{10}{15}$$

$$\frac{4}{5} \times \frac{\quad}{\quad} = \frac{\quad}{15}$$

$$\frac{4}{5} \times \frac{3}{3} = \frac{12}{15}$$

$$\frac{10}{15} + \frac{12}{15} = \frac{22}{15}$$

Step 1:

Find the **L**east **C**ommon **M**ultiple (LCM):

3: 3, 6, 9, 12, **15**, 18

5: 5, 10, **15**, 20, 25, 30

Step 2: Set the LCM as the new denominator after the “=” sign for both fractions.

Step 3: Find the missing factor that multiplies to equal the new denominator.

Step 4: Whatever you do on the bottom, you do on the top.

**Repeat** steps 3 and 4 for the second fraction.

Step 5: Add the numerators.  
Keep the denominator the same.

# Day 1:

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

$$\frac{1}{3} \times \text{---} = \text{---}$$

$$\frac{1}{2} \times \text{---} = \text{---}$$

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

# Day 2:

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

$$\frac{3}{5} \times \text{---} = \text{---}$$

$$\frac{2}{3} \times \text{---} = \text{---}$$

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

# Day 3:

$$\frac{7}{8} + \frac{1}{10} =$$

$$\frac{7}{8} \times \text{---} = \text{---}$$

$$\frac{1}{10} \times \text{---} = \text{---}$$

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

# Day 4:

$$\frac{5}{12} + \frac{1}{4} =$$

$$\frac{5}{12} \times \text{---} = \text{---}$$

$$\frac{1}{4} \times \text{---} = \text{---}$$

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

# Day 5:

$$\frac{1}{2} + \frac{4}{7} =$$

$$\frac{1}{2} \times \text{---} = \text{---}$$

$$\frac{4}{7} \times \text{---} = \text{---}$$

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

# Day 6:

$$\frac{5}{6} - \frac{1}{8} =$$

$$\frac{5}{6} \times \text{---} = \text{---}$$

$$\frac{1}{8} \times \text{---} = \text{---}$$

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

# Day 7:

$$\frac{6}{10} - \frac{3}{15} =$$

$$\frac{6}{10} \times \text{---} = \text{---}$$

$$\frac{3}{15} \times \text{---} = \text{---}$$

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