Warm-up



Remember how to find common denominators

$\frac{1}{2} \times 6 = \frac{6}{12} > \frac{3}{12}$

LCM = 12

2, 4, 6, 8, 10, 12

12, 24, 36, 48, 60, 72

$\frac{1}{2} = \frac{6}{12}$

We need to know how to find common denominators so we can....

Add Fractions!

How to add fractions

1. Step 1: *find the common denominator between the two fractions.*
2. Step 2: *add the numerators & keep the denominators the same.*
3. **Step 3: *Simplify to it's lowest form***
    - *we have to ALWAYS do this to get the final answer*

Example 1:

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

$\frac{6}{5}$ ✓

① Find common denominator.

LCM

4 (8)

(8)

Example 2:

$$\frac{3^{\times 2}}{4^{\times 2}} + \frac{5}{8}$$

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

$\frac{11}{8}$ ✓

before you say you cannot do this.....

1. Can you add?
2. Do you know what a fraction is?
3. Can you find the multiples?

Let's do these together

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

LCM: 2, 4, 6
6, 12,

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

$\frac{6}{6} \overset{\div 6}{} = \frac{1}{1} = 1$

$\frac{4}{5} \overset{\times 3}{} + \frac{8}{15}$

LCM
5, 10, 15
15, 30

$\frac{12}{15} + \frac{8}{15}$

$\frac{20}{15} \overset{\div 5}{} = \frac{4}{3}$

GCF:
20: 1 x 20, 2 x 10, 4 x 5
15: 1 x 15, 3 x 5

You try

$\frac{2}{3} \overset{\times 3}{} + \frac{6}{9}$

LCM: 9

3, 6, 9

9, 18

$\frac{6}{9} + \frac{6}{9}$

$\frac{12}{9} \overset{\div 3}{} = \frac{4}{3}$

GCF = 3

12: 1x12, 2x6, 3x4

9: 1x9, 3x3

$\frac{3}{4} \overset{\times 3}{} + \frac{3}{12}$

LCM: 12

$\frac{9}{12} + \frac{3}{12}$

$\frac{12}{12} \overset{\div 12}{} = \frac{1}{1} = 1$

$\frac{5}{7} + \frac{2}{9}$

$\times 9$ $\times 7$

7×9 $9^{\times 7}$

$\frac{45}{63} + \frac{14}{63}$

$\frac{59}{63}$ ✓

LCM: 63

7, 14, 21, 28, 35, 42, 49, 56, 63, 70

9, 18, 27, 36, 45, 54, 63

You try

$\frac{5}{10} + \frac{1}{15}$ LCM: 30

$\frac{5^{\times 3}}{10^{\times 3}} + \frac{1^{\times 2}}{15^{\times 2}}$

$\frac{15}{30} + \frac{2}{30}$

$\frac{17}{30}$

$\frac{3}{4} + \frac{3}{5}$ LCM = 20

$\frac{3^{\times 5}}{4^{\times 5}} + \frac{3^{\times 4}}{5^{\times 4}}$

$\frac{15}{20} + \frac{12}{20}$

$\frac{27}{20}$ ✓

Homework