2-Add/Subtract Fractions

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I CAN APPLY STRATEGIES TO ADD AND SUBTRACT FRACTIONS

- Recall: LCM and common denominator
- When adding or subtracting fractions with 'like' denominators we add the numerator but leave the denominator.

EXAMPLE:

a) $\frac{1}{5}+\frac{3}{5}=\boxed{\frac{4}{5}}$

b) $\frac{2}{10}+\frac{7}{10}=\boxed{\frac{9}{10}}$

c) $\frac{12}{13}+\frac{(+3)}{13}=\frac{15}{13}=1\frac{2}{13}$

d) $\frac{-3}{4}+\frac{5}{4}=\frac{2}{4}\overset{\div 2}{\div 2}=\boxed{\frac{1}{2}}$

e) $\frac{4}{7}-\frac{3}{7}=\boxed{\frac{1}{7}}$

$-\frac{9}{7}$ $-\frac{9}{7}$ $\frac{9}{-7}$ $2+(-9)$

f) $\frac{2}{7}+\left(-\frac{9}{7}\right)=-\frac{7}{7}=-1$

- Adding or subtracting fractions with different denominators.
  1. If the denominators are different, find the lowest common denominator (LCD)
  2. Multiply both the numerator and denominator by a number that will result in the LCD (multiply top and bottom)
  3. ADD/SUBTRACT the numerators
  4. Keep the denominator
  5. Reduce if possible.

EXAMPLE:

LCD = 20

1. $\frac{7}{4}\overset{\times 5}{\times 5}-\frac{8}{5}\overset{\times 4}{\times 4}$

$=\frac{35}{20}-\frac{32}{20}$

$=\boxed{\frac{3}{20}}$

LCD = 14

5. $\frac{3}{2}\overset{\times 7}{\times 7}-\frac{9}{7}\overset{\times 2}{\times 2}$

$=\frac{21}{14}-\frac{18}{14}$

$=\boxed{\frac{3}{14}}$

LCD = 15

9. $\frac{4}{3}\overset{\times 5}{\times 5}-\frac{2}{5}\overset{\times 3}{\times 3}$

$=\frac{20}{15}-\frac{6}{15}$

$=\boxed{\frac{14}{15}}$

LCD = 4

2. $\frac{23}{2}\overset{\times 2}{\times 2}+\frac{9}{4}$

$=\frac{46}{4}+\frac{9}{4}$

$=\frac{55}{4}$

$=13\frac{3}{4}$

6. $\frac{7}{10}+\frac{2}{5}\overset{\times 2}{\times 2}$

$=\frac{7}{10}+\frac{4}{10}$

$=\boxed{\frac{11}{10}=1\frac{1}{10}}$

LCD = 6

10. $\frac{5}{2}\overset{\times 3}{\times 3}+\frac{2}{3}\overset{\times 2}{\times 2}$

$=\frac{15}{6}+\frac{4}{6}$

$=\boxed{\frac{19}{6}=3\frac{1}{6}}$

A B C D E F

G H I J K L