ADD AND SUBTRACT MIXED NUMBERS

HOMEWORK GRADE
02/02/2021

Select the correct answer. Always simplify to find your lowest fraction.

Example: Solve for the sum of $2\frac{4}{8} + \frac{1}{4}$.

Step 1: Set up your problem -> $2\frac{4}{8} + \frac{1}{4} =$

Step 2: Turn your mixed number into an improper fraction.

+

$$2\frac{4}{8} = \frac{20}{8}$$

x

Step 3: Rewrite the problem using the improper fraction

$$\frac{20}{8} + \frac{1}{4} =$$

Step 4: Find the LCM using the two denominators in order to find a common denominator

8	4
8	4
16	8
24	12
32	16
40	20

LCM = 8

1. Solve for the sum of $2\frac{2}{12} + \frac{1}{4}$.

$2\frac{5}{12}$	$2\frac{1}{3}$	$2\frac{2}{16}$

2. Solve for the sum of $1\frac{2}{6} + \frac{1}{3}$.

$1\frac{3}{9}$	$1\frac{4}{6}$	$1\frac{2}{3}$

3. Solve for the difference of $3\frac{2}{8} - \frac{3}{4}$.

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

Step 5: Change your denominators to 8 for the common denominator. Then change your numerator. Since $\frac{20}{8}$ already has a denominator of 8, your numerator will not change. The fraction $\frac{1}{4}$ needs to be changed, the 4 becomes 8 by being multiplied by 2, so the numerator 1 has to be multiplied by 2 to equal 2. Now solve!

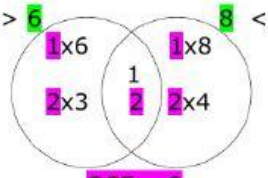
$$\frac{20}{8} + \frac{2}{8} = \frac{22}{8}$$

Step 6: Turn your improper fraction $\frac{22}{8}$ back into a mixed number by dividing the numerator by the denominator.

$$\begin{array}{r} 2 \text{ R6} \\ 8\overline{)22} \\ \underline{-16} \\ 6 \end{array} = 2\frac{6}{8}$$

Step 7: Simplify your answer by finding the GCF of your answer in step 1.

numerator -> 6 8 <- denominator



GCF = 2

Step 8: Divided your numerator and denominator by the GCF. Keep your whole number the same.

$$\frac{6}{8} \div \frac{2}{2} = \frac{3}{4}$$

Final Answer: $2\frac{3}{4}$

4. Solve for the difference of $1\frac{1}{3} - \frac{1}{9}$.

$1\frac{2}{9}$	$1\frac{0}{6}$	$1\frac{5}{9}$

* Remember – if your GCF =1, then your fraction is in its simplest form, it stays the same.