

## ADD AND SUBTRACT MIXED NUMBERS

**HOMEWORK GRADE**

**02/03/2021**

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

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

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

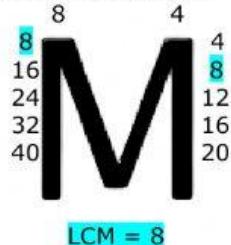
Step 2: Turn your mixed numbers into improper fractions.

$$2\frac{4}{8} = \frac{20}{8} \quad \text{and} \quad 2\frac{1}{4} = \frac{9}{4}$$

Step 3: Rewrite the problem using the improper fraction

$$\frac{20}{8} + \frac{9}{4} =$$

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



1. Solve for the sum of  $2\frac{3}{12} + 2\frac{1}{4}$ .

$4\frac{6}{12}$	$4\frac{1}{2}$	$4\frac{3}{16}$
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2. Solve for the sum of  $1\frac{2}{6} + 1\frac{1}{3}$ .

$2\frac{3}{9}$	$2\frac{4}{6}$	$2\frac{2}{3}$
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3. Solve for the difference of  $3\frac{2}{8} - 1\frac{3}{4}$ .

$1\frac{4}{8}$	$1\frac{1}{2}$	$2\frac{1}{4}$
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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  $\frac{9}{4}$  needs to be changed, the 4 becomes 8 by being multiplied by 2, so the numerator 9 has to be multiplied by 2 to equal 18. Now solve!

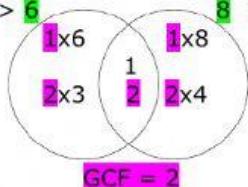
$$\frac{20}{8} + \frac{18}{8} = \frac{38}{8}$$

Step 6: Turn your improper fraction  $\frac{38}{8}$  back into a mixed number by dividing the numerator by the denominator.

$$\begin{array}{r} 4 \text{ R} 6 \\ 8)38 \\ -32 \\ \hline 6 \end{array}$$

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

numerator -> 6 <- denominator



Step 8: Divide 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:  $4\frac{3}{4}$

4. Solve for the difference of  $2\frac{1}{3} - 1\frac{1}{9}$ .

$1\frac{2}{9}$	$1\frac{0}{6}$	$\frac{11}{9}$
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\* Remember – if your GCF =1, then your fraction is in its simplest form, it stays the same.