3-FRACTION PROBLEMS

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

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

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

Step 2: Find the LCM using the two denominators in order to find a common denominator

$$
\begin{array}{ll}
8 & 4 \\
8 & 4 \\
16 & 8 \\
24 & 12 \\
32 & 16 \\
40 & 20
\end{array}
$$

M

LCM = 8
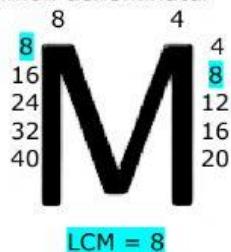
Step 3: Change your denominators to 8 for the common denominator. Then change your numerator. Since $\frac{4}{8}$ and $\frac{1}{8}$ already has a denominator of 8, your numerator will not change. The fraction $\frac{1}{4}$ needs to be changed, the 4 becomes 8 by being multiplied by 2, so the numerator 1 has to be multiplied by 2 to equal 2. Now solve!

$$\frac{4}{8} + \frac{2}{8} + \frac{1}{8} = \frac{7}{8}$$

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

$\frac{2}{3}$	$\frac{8}{12}$	$\frac{4}{20}$

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

$\frac{5}{6}$	$\frac{3}{6}$	$\frac{4}{17}$

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

$\frac{6}{8}$	$\frac{5}{20}$	$\frac{3}{4}$

Step 4: Simplify your answer by finding the GCF of your answer in step 1.

numerator -> 7   8 <- denominator

1x7   1x8
      1
      2x4
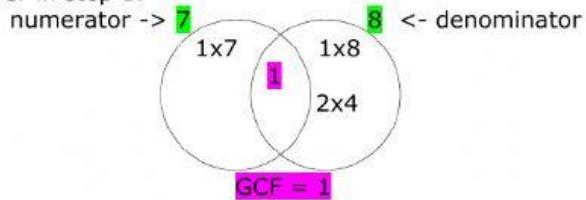
GCF = 1

Step 5: Divided your numerator and denominator by the GCF.

$$\frac{7}{8} \div \frac{1}{1} = \frac{7}{8}$$

Final Answer: $\frac{7}{8}$

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

4. Solve for the sum of $\frac{1}{3} + \frac{1}{3} + \frac{1}{9}$.

| $\frac{3}{15}$ | $\frac{7}{9}$ | $\frac{3}{27}$ |