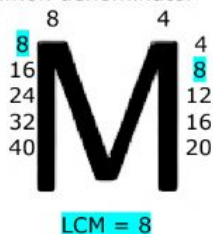# FRACTION WORD PROBLEMS WITH UNLIKE DENOMINATORS

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

Example: Solve for the difference of $\frac{4}{8}$ and $\frac{1}{4}$.

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

Step 2: 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
```
M

LCM = 8

Step 3: Change your denominators to 8 for the common denominator. Then change your numerator. Since $\frac{4}{8}$ 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!

1. Ariel walked $\frac{5}{12}$ of a mile to the park. Then she walked $\frac{1}{3}$ of a mile to the ice shop. How far did Ariel walk?

$\frac{3}{4}$	$\frac{9}{12}$	$\frac{6}{15}$

2. Grandma is baking two different types of sweets. She uses of $\frac{2}{3}$ cup of sugar for the cake and $\frac{1}{6}$ cup of sugar for the brownies. How much sugar did grandma use?
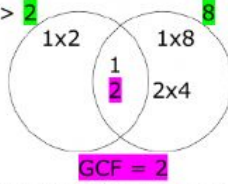
$\frac{5}{6}$	$\frac{3}{6}$	$\frac{3}{9}$

$$\frac{4}{8} - \frac{1}{4} =$$

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

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

numerator -> 2   8 <- denominator

1x2   1x8

$\frac{1}{2}$

2x4

GCF = 2

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

$$\frac{2}{8} \div \frac{2}{2} = \frac{1}{4}$$

Final Answer: $\frac{1}{4}$

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

3. Javyn ordered a pizza for dinner. The whole pizza was cut into $\frac{8}{8}$ slices. He ate $\frac{1}{4}$ of the pizza before leaving for practice. How much of the pizza is left?

$\frac{6}{8}$	$\frac{7}{4}$	$\frac{3}{4}$

4. Mrs. Jefferson is making a quilt. She started sewing with $\frac{11}{12}$ of her fabric. When she finished for the evening, she only had $\frac{1}{6}$ of her fabric left. How much fabric did Mrs. Jefferson use?

$\frac{9}{12}$	$\frac{3}{4}$	$\frac{10}{6}$