G ood morning, class.
   I hope you've all been well!

As you should know by now, I will be out for the rest of the week. Here are your instructions for tomorrow… your instructions for Friday will be provided to you by your substitute.

For today, please complete the following worksheet and turn it in as homework by **Monday, December 9th.** We'll be going over this together once I return. This worksheet has some notes for you all to follow.

Adding and Subtracting Fractions

Hopefully this isn't too unfamiliar for you at this point in the year!

Recall that you cannot add and subtract two fractions that have different denominators. Before we can add the numerators together, we need to make the denominators the same… but how? Find the **Least Common Multiple!**

Remember – the phrase "least common multiple" means "smallest multiple that both numbers share." We are multiplying the denominators to become the Least Common Multiples – **WHAT YOU DO TO THE DENOMINATOR, YOU MUST DO TO THE NUMERATOR!** See the example below.

What is the LCM of 4 and 3?

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

4	4	8	12
3	3	6	9	12

12

Change denominators, add numerators.

$$\frac{2 \times 4}{3 \times 4} + \frac{1 \times 3}{1 \times 3} = \frac{8}{12} + \frac{3}{12} = \frac{11}{12}$$

I did to my numerator what I did to the denominator!!! This is the most important step!

"But what if I need to subtract?" No problem! Use the exact same steps. See below.

$$\frac{8}{9} - \frac{5}{6} \longrightarrow \frac{8 \times 2}{9 \times 2} - \frac{5 \times 3}{6 \times 3} = \frac{16}{18} - \frac{15}{18} = \frac{1}{18}$$

LCM is 18.

Your Turn

** Leave any improper fractions as mixed numbers!!! **

1. $\frac{1}{4} + \frac{1}{2}$

6. $\frac{4}{10} + \frac{4}{9}$

2. $\frac{4}{5} - \frac{3}{4}$

7. $\frac{11}{15} - \frac{2}{5}$

3. $\frac{2}{5} + \frac{5}{6}$

8. $\frac{9}{13} - \frac{5}{39}$

4. $\frac{10}{11} - \frac{5}{7}$

9. $\frac{5}{7} + \frac{7}{9}$

5. $\frac{2}{12} + \frac{7}{8}$

10. $\frac{19}{20} - \frac{15}{30}$

Word Problems

1. Jessica bought 8/9 of a pound of chocolates and ate 1/3 of a pound. How much was left?
2. Tom bought a board that was 7/8 of a yard long. He cut off 1/2 of a yard. How much was left?
3. The track is 3/5 of a mile long. If Tyrone jogged around it twice, how far did he run?
4. Stanley ordered two pizzas cut into eighths. If he ate 5/8 of a pizza, how much was left?