**Math week of June 8th**
**Adding and Subtracting Fractions**

You made it to the last week! This week, please complete the following two worksheets and send the answers to your teacher!

## 6.7 Common fractions: Adding mixed numbers with unrelated denominators (composing whole numbers)

**Step In**

How would you calculate the total of these two amounts?


The fractional part of both numbers has to be rewritten before you can add.

What denominator do these two fractions have in common?

Write the missing numerators.

$1\frac{2}{3} + 1\frac{3}{4} = 1\frac{\quad}{12} + 1\frac{\quad}{12}$

How would you figure out the total?

What mixed number would you write?

I would add the whole numbers, then the fractions. That is $1 + 1 + \frac{17}{12}$. The total is $3\frac{5}{12}$.

**Write an equation to add these two fractions. Try to calculate the total in your head.**

$1\frac{3}{5} + 3\frac{1}{2} = \square + \square$

**Step Up**

1. For each of these, rewrite the mixed numbers so the fractions have the same denominators. Then show how you add to calculate the total.

a. $1\frac{2}{3} + 1\frac{3}{4} = \square$

b. $2\frac{2}{3} + 1\frac{3}{5} = \square$





2. Calculate each total. Show your thinking.

a. $1\frac{5}{6} + 2\frac{3}{4} = \square$

b. $2\frac{5}{6} + 1\frac{9}{24} = \square$

3. Estimate then solve each problem. Show your thinking.

a. Awan has two lengths of lumber. One piece is $2\frac{1}{2}$ yards long and another is $\frac{3}{4}$ yards long. He needs a total length of $4\frac{1}{3}$ yards. What length of lumber does he need to buy?

$\square$ yards

b. Jennifer is cooking rice. In one pot she has $1\frac{1}{2}$ cups of white rice, and in another she has $\frac{3}{4}$ cup of brown rice. In a third pot, Jennifer has $\frac{1}{3}$ cup more of jasmine rice than she has in the pot of white rice. How much rice is being cooked in total?

$\square$ cups

**Step Ahead**

Write different mixed numbers to make each equation true. Make the denominators of the fractions different. Show your thinking on page 232.

a. $\square + \square + \square = 6$

b. $\square + \square + \square = 7\frac{3}{4}$

## 7.8 Common fractions: Subtracting with same denominators

### Step In

**Damon went to the movies and bought a small box of popcorn.**


At the start of the movie, the box was $\frac{7}{8}$ full.
By the end of the movie, Damon had eaten $\frac{5}{8}$ of the box.

How full was the box after the movie?

What equation could you write?

**When you subtract fractions what happens to the numerator?**
What happens to the denominator?

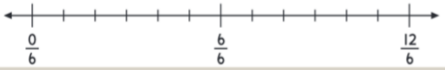
How could you show the difference on this number line?


**Ruby and her friend bought a box of popcorn to share. The box was full.**
**By the end of the movie, they had each eaten $\frac{3}{8}$ of the box.**
How full was the box at the end of the movie? How could you calculate the amount?

### Step Up

**1.** Draw and label jumps to match each equation.

a. $\frac{11}{6} - \frac{7}{6} = \frac{4}{6}$




b. $\frac{13}{8} - \frac{4}{8} = \frac{9}{8}$


c. $\frac{16}{4} - \frac{12}{4} = \frac{4}{4}$






**2.** Use this number line to help you write the differences.


a. $\frac{15}{6} - \frac{4}{6} = $ ___

b. ___ $= \frac{20}{6} - \frac{8}{6}$

c. $\frac{17}{6} - \frac{2}{6} = $ ___

d. ___ $= \frac{23}{6} - \frac{9}{6}$

e. $\frac{21}{6} - \frac{16}{6} = $ ___

f. ___ $= \frac{18}{6} - 1$

**3.** Use what you know about subtracting fractions to calculate the difference between each pair of numbers.

a. $\frac{9}{10}$ $\frac{4}{10}$ Difference ___

b. $\frac{15}{4}$ $\frac{12}{4}$ Difference ___

c. $\frac{5}{8}$ $\frac{23}{8}$ Difference ___

d. $1$ $\frac{3}{8}$ Difference ___

**4.** Write the missing fraction in each equation.

a. $\frac{11}{12} = \frac{18}{12} - $ ___

b. $\frac{34}{8} - $ ___ $= \frac{26}{8}$

c. $\frac{2}{3} = $ ___ $- \frac{14}{3}$

### Step Ahead

Complete each equation so the difference is **between 2 and 3**.

a. $\frac{16}{4} - $ ___ $= $ ___

b. $\frac{25}{6} - $ ___ $= $ ___

c. $\frac{20}{8} - $ ___ $= $ ___

d. $\frac{22}{4} - $ ___ $= $ ___

Working Space