

Math Week of June 1st
Adding and Subtracting Fractions

- 1) Watch these three videos on adding and subtracting fractions
 - [Adding Fractions with Unlike Denominators](#)
 - [Subtracting Fractions with Unlike Denominators](#)
 - [Adding and Subtracting Mixed Numbers](#)

- 2) Practice time! Go to I-station and complete the mission on Adding fractions with like or unlike denominators and let me know how you did!

- 3) Show what you know! As you know, to add and subtract fractions with UNLIKE denominators, you need to find a common multiple of both denominators. Show what you know with the two worksheets below. The first worksheet focuses on finding common denominators and the second practices adding fractions with unlike denominators. Complete the two worksheets below and send your answers or a screen shot to me at 717-881-1980 or my email pakem@pwcs.edu

- 4) If you would like more practice with math you may do one of the following
 - Complete a page in your Math Madness book
 - Take the ISIP for Math on I-station

9.6 Common fractions: Finding common denominators

Step In

Anna compares two muffin recipes. One uses $\frac{2}{3}$ cup of flour. The other recipe uses $\frac{3}{4}$ cup of flour.

Which recipe uses more flour?
How can you figure it out?

Hmmm... this is a little tricky. Neither denominator is a multiple of the other one.



What could you do to both denominators to make equivalent fractions?

You could find a multiple that is the same for each denominator.

How could you figure out what multiple they have in common?

Marvin figured it out by listing all the multiples of 3 that he knew. He then started listing the multiples of 4.

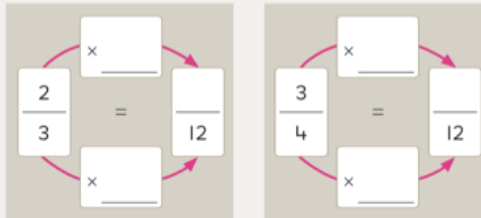


3 6 9 12 15 18 21 24 27 30

4 8 12

Circle the multiple that is common to both denominators.

Complete each diagram to show equivalent fractions for $\frac{2}{3}$ and $\frac{3}{4}$.



Which fraction is greater?

Step Up

I. Identify whether you have to change **one** denominator or **both** denominators to compare the fractions. Color the beside the statement that is correct.

- | | | |
|--|--|--|
| <p>a. $\frac{2}{4}$ $\frac{5}{8}$</p> <p><input type="checkbox"/> I need to change one.</p> <p><input type="checkbox"/> I need to change both.</p> | <p>b. $\frac{2}{5}$ $\frac{3}{8}$</p> <p><input type="checkbox"/> I need to change one.</p> <p><input type="checkbox"/> I need to change both.</p> | <p>c. $\frac{2}{3}$ $\frac{4}{5}$</p> <p><input type="checkbox"/> I need to change one.</p> <p><input type="checkbox"/> I need to change both.</p> |
|--|--|--|

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2. Circle the common multiples.

a. Multiples of 3	3	6	9	12	15	18	21	24	27	30
Multiples of 5	5	10	15	20	25	30	35	40	45	50
b. Multiples of 4	4	8	12	16	20	24	28	32	36	40
Multiples of 6	6	12	18	24	30	36	42	48	54	60

3. For each pair of fractions, complete the diagram to show equivalent fractions that have a common denominator. Then complete the statement. Use the common multiples in Question 2 to help you.

a. $\frac{2}{3}$ and $\frac{3}{5}$

A common multiple is .

so a common denominator is .

b. $\frac{5}{6}$ and $\frac{3}{4}$

A common multiple is .

so a common denominator is .

Step Ahead

In some problems, a common denominator can be found by using division and looking for common factors.

a. Rewrite $\frac{12}{18}$ and $\frac{10}{12}$ as fractions with a common denominator of 6.

b. Which fraction is greater?

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6.4 Common fractions: Adding (unrelated denominators)

Step In Shiro ran $\frac{4}{5}$ of a mile on Saturday and $\frac{2}{3}$ of a mile on Sunday.

What is your estimate for the total distance he ran?

How did you form your estimate?

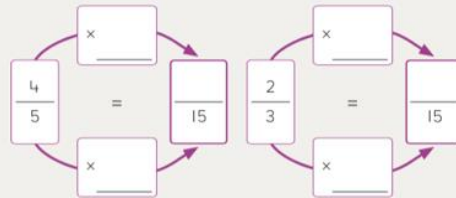
How would you calculate the exact distance?

What denominator do the two fractions have in common?

Complete the diagram to find equivalent fractions that share a common denominator.

Complete the equation to calculate the total distance he ran.

I will have to change both denominators to find a denominator they each have in common.



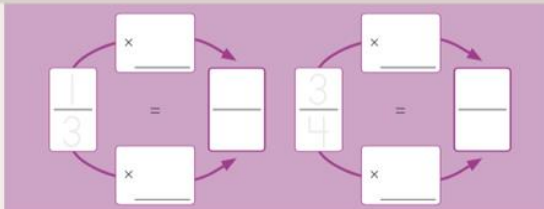
Shiro ran $\frac{22}{15}$ of a mile. That is equivalent to $1\frac{7}{15}$ miles, which is a little bit less than $1\frac{1}{2}$ miles.

$$\frac{\quad}{15} + \frac{\quad}{15} = \frac{\quad}{15}$$

Step Up 1. Use the diagram to find equivalent fractions that share a common denominator. Rewrite the equation. Then write the totals.

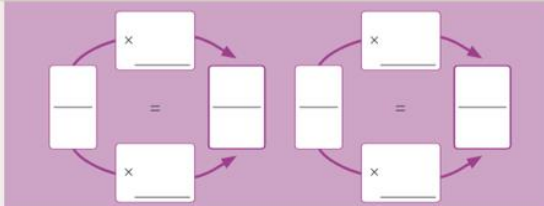
a. $\frac{1}{3} + \frac{3}{4} = \frac{\quad}{\quad}$

$$\frac{\quad}{\quad} + \frac{\quad}{\quad} = \frac{\quad}{\quad}$$



b. $\frac{2}{5} + \frac{1}{4} = \frac{\quad}{\quad}$

$$\frac{\quad}{\quad} + \frac{\quad}{\quad} = \frac{\quad}{\quad}$$



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2. Estimate the sum before writing both fractions so the denominators are the same. Then write the sum.

a. $\frac{1}{3} + \frac{3}{5} = \frac{\quad}{\quad}$

b. $\frac{4}{3} + \frac{3}{8} = \frac{\quad}{\quad}$

c. $\frac{3}{5} + \frac{1}{12} = \frac{\quad}{\quad}$

d. $\frac{1}{4} + \frac{1}{6} = \frac{\quad}{\quad}$

e. $\frac{3}{8} + \frac{1}{3} = \frac{\quad}{\quad}$

f. $\frac{4}{9} + \frac{10}{8} = \frac{\quad}{\quad}$

3. Solve each problem. Show your thinking.

a. Grace, Aston, and Teena live on the same road. Aston's house is between Grace and Teena. Grace lives $\frac{1}{3}$ mile from Aston and he lives $\frac{1}{2}$ mile from Teena. How far is it from Grace's house to Teena's house?

b. Parcel A weighs $\frac{7}{10}$ kg, Parcel B weighs $\frac{4}{5}$ kg, and Parcel C weighs $\frac{1}{4}$ kg. How much less than 2 kg is the total mass of all the parcels?

miles

kg

Step Ahead

Use common fractions with different denominators to complete each equation.

Show your thinking on page 232.

a. $\frac{\quad}{\quad} + \frac{\quad}{\quad} = 1\frac{1}{4}$

b. $\frac{\quad}{\quad} + \frac{\quad}{\quad} = 1\frac{1}{4}$

c. $\frac{\quad}{\quad} + \frac{\quad}{\quad} = 1\frac{1}{4}$

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