

# Math Week of May 25<sup>th</sup>

## Mixed Numbers and Improper Fractions

1) Do you remember how mixed numbers and improper fractions are two different ways to write the same fraction? Refresh your memory by watching the video links below

- [Turning Mixed Numbers into Improper Fractions](#)
- [Turning Improper Fractions into Mixed Numbers](#)

2) Show what you know!

Practice converting improper fractions into mixed numbers and send me an email with your work to [freedyak@pwcs.edu](mailto:freedyak@pwcs.edu) or my cell phone 571-488-5046


**4.4** Common fractions: Converting improper fractions to mixed numbers

**Step In** A recipe uses  $\frac{3}{4}$  cup of milk to make one batch of eight pancakes.

Manuel wants to make six batches of pancakes, so he will need  $6 \times \frac{3}{4}$  or  $\frac{18}{4}$  cups of milk.

How many whole cups of milk will he need?  
How could you figure it out?

I know that 4 one-fourths makes one whole, and 8 one-fourths makes two wholes. I need to find out how many wholes I can make with 18 one-fourths.



I think there might be a remainder involved.

A proper fraction has a numerator that is less than its denominator. An improper fraction has a numerator that is equal to or greater than its denominator.

How do you write  $\frac{18}{4}$  as a mixed number?

**Step Up** I. Write each improper fraction as a mixed number. Show your thinking.

<p>a. <math>\frac{9}{4}</math> is equivalent to <input style="width: 50px;" type="text"/></p>	<p>b. <math>\frac{5}{2}</math> is equivalent to <input style="width: 50px;" type="text"/></p>
<p>c. <math>\frac{8}{3}</math> is equivalent to <input style="width: 50px;" type="text"/></p>	<p>d. <math>\frac{15}{8}</math> is equivalent to <input style="width: 50px;" type="text"/></p>

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2. Write each improper fraction as a mixed number. Show your thinking.

<p>a. <math>\frac{14}{6}</math> is equivalent to <input style="width: 50px;" type="text"/></p>	<p>b. <math>\frac{32}{10}</math> is equivalent to <input style="width: 50px;" type="text"/></p>
<p>c. <math>\frac{34}{5}</math> is equivalent to <input style="width: 50px;" type="text"/></p>	<p>d. <math>\frac{27}{12}</math> is equivalent to <input style="width: 50px;" type="text"/></p>

3. Read each story and write the total as a mixed number. Show your thinking.

<p>a. One box weighs <math>\frac{3}{4}</math> pound. Nine of those boxes together weigh <math>\frac{27}{4}</math> pounds.</p>	<p>b. One hair ribbon is <math>\frac{5}{6}</math> of a yard long. To make 7 ribbons, <math>\frac{35}{6}</math> yd of ribbon is needed.</p>
<p><input style="width: 50px;" type="text"/> lb</p>	<p><input style="width: 50px;" type="text"/> yd</p>

**Step Ahead** Circle the greater amount in each pair.

<p>a. <math>1\frac{5}{6}</math> or <math>\frac{10}{6}</math></p>	<div style="border: 1px solid #ccc; height: 100px; width: 100%;"></div> <p style="text-align: center; margin-top: 5px;">Working Space</p>
<p>b. <math>2\frac{3}{4}</math> or <math>\frac{23}{8}</math></p>	
<p>c. <math>5\frac{5}{5}</math> or <math>1\frac{4}{12}</math></p>	

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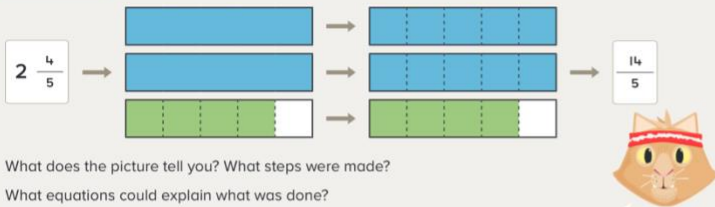
Now practice converting mixed numbers into improper fractions. Send me an email with your work to [freedyak@pwcs.edu](mailto:freedyak@pwcs.edu) or my cell phone 571-488-5046

4.5

**Common fractions: Converting mixed numbers to improper fractions**

**Step In**

Kyle changed  $2\frac{4}{5}$  to an improper fraction. He drew this picture to show his thinking.



What does the picture tell you? What steps were made?  
 What equations could explain what was done?

The denominator tells me that we are working with fifths. I need to think about how many one-fifths are equal to 2 wholes.

Brianna showed her thinking this way.



Jose showed his thinking like this.



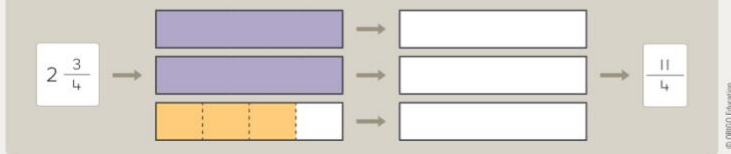
How do Brianna's and Jose's methods relate to the picture Kyle drew?

How do they relate to each other?

How could you use these methods to change  $5\frac{2}{6}$  to an improper fraction?

**Step Up**

1. Adjust this picture to show how  $2\frac{3}{4}$  is equivalent to  $\frac{11}{4}$ .



2. Write each mixed number as an improper fraction. Show your thinking.

a.  $4\frac{2}{3}$  is equivalent to  $\frac{\quad}{\quad}$

b.  $5\frac{2}{6}$  is equivalent to  $\frac{\quad}{\quad}$

c.  $2\frac{1}{4}$  is equivalent to  $\frac{\quad}{\quad}$

d.  $4\frac{1}{4}$  is equivalent to  $\frac{\quad}{\quad}$

e.  $6\frac{3}{10}$  is equivalent to  $\frac{\quad}{\quad}$

**Step Ahead**

Carol used these steps to rewrite  $3\frac{2}{5}$  as an improper fraction. What mistake did she make?



3) Pick one activity to do:

- Complete a page in your math madness book
- Spend 20 minutes on i-station
- Go back to the class page, click on daily math, and complete the current day's activity