

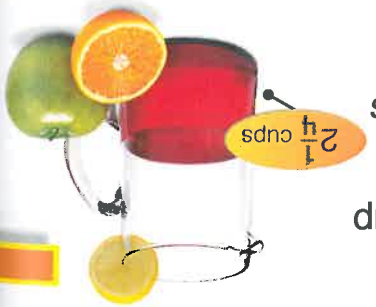
Understand it!  
Fractions can have a value greater than 1.

# Using Improper Fractions and Mixed Numbers

How can you name an amount in two different ways?

How many times will Matt need to fill his  $\frac{1}{4}$  cup container to make  $2\frac{1}{4}$  cups of punch?

$2\frac{1}{4}$  is a mixed number. A mixed number has a whole number part and a fraction part.



## Mental Computation

Answer each of the following as a proper, improper or mixed number fraction.

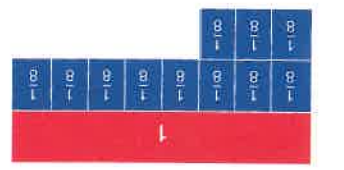
1  $\frac{3}{8} + \frac{6}{8} =$

2  $\frac{3}{4} - \frac{3}{2} =$

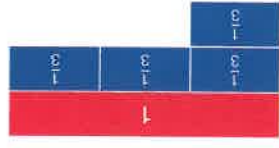
3  $\frac{4}{3} - \frac{1}{4} =$

## Guided Practice

Write the mixed number fraction as an improper fraction. Use the model to help.



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



5  $3\frac{3}{4}$

6 How could you model  $2\frac{1}{4}$  using fraction strips? Draw the fraction strips.

Write each number as a mixed number or improper fraction.

8  $1\frac{3}{4}$

9  $\frac{7}{3}$

10  $3\frac{1}{5}$

## Independent Practice

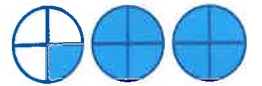
7 If Matt filled a  $2\frac{1}{5}$  cup container, how many  $\frac{1}{5}$  cups would he need to use?

**One Way**  
Use a model to write  $2\frac{1}{4}$  as an improper fraction.

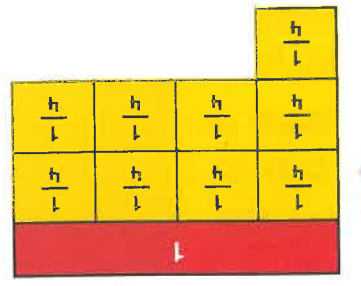
An improper fraction has a numerator greater than or equal to its denominator.

Count the shaded quarters. There are 9 quarters or  $\frac{9}{4}$  shaded. So,  $2\frac{1}{4} = \frac{9}{4}$ .

$\frac{9}{4}$  is an improper fraction. Matt needs to fill the  $\frac{1}{4}$  cup container 9 times.



**Another Way**  
Use fraction strips.



So,  $2\frac{1}{4} = \frac{9}{4}$ .

## Problem Solving



Find 5 solutions for this equation. Show your solutions in a variety of ways: as an equation, model, drawing or on a number line.

13a  $2\frac{3}{4} =$

12 Jess used  $\frac{5}{8}$  kg of apples to make apple pies for her family. How many kilograms did she use?

11 Chloe used  $\frac{3}{10}$  cups of water to make lemonade. How many cups of lemonade did she make?

Draw fraction strips to show the answer as a mixed number fraction.

