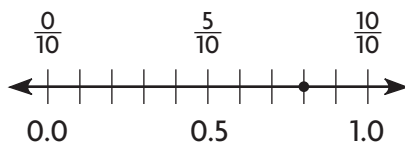Name _____

Relate Tenths and Decimals
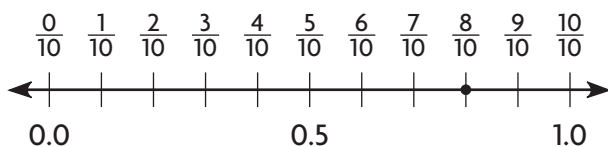
Write the fraction and the decimal that are shown by the point on the number line.

$\frac{0}{10}$　　　　$\frac{5}{10}$　　　　$\frac{10}{10}$

0.0　　　　0.5　　　　1.0

Step 1 Count the number of equal parts of the whole shown on the number line. There are ten equal parts.
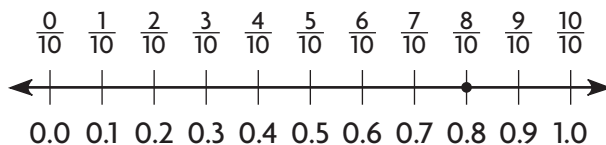
This tells you that the number line shows tenths.

Step 2 Label the number line with the missing fractions. What fraction is shown by the point on the number line?

$\frac{0}{10}$　$\frac{1}{10}$　$\frac{2}{10}$　$\frac{3}{10}$　$\frac{4}{10}$　$\frac{5}{10}$　$\frac{6}{10}$　$\frac{7}{10}$　$\frac{8}{10}$　$\frac{9}{10}$　$\frac{10}{10}$

0.0　　　　0.5　　　　1.0

The fraction shown by the point on the number line is $\frac{8}{10}$.

Step 3 Label the number line with the missing decimals. What decimal is shown by the point on the number line?

$\frac{0}{10}$　$\frac{1}{10}$　$\frac{2}{10}$　$\frac{3}{10}$　$\frac{4}{10}$　$\frac{5}{10}$　$\frac{6}{10}$　$\frac{7}{10}$　$\frac{8}{10}$　$\frac{9}{10}$　$\frac{10}{10}$

0.0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0

The decimal shown by the point on the number line is 0.8.

So, the fraction and decimal shown by the point on the number line
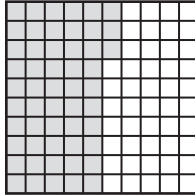
are $\frac{8}{10}$ and 0.8.

Write the fraction or mixed number and the decimal shown by the model.

1.

$\frac{0}{10}$　　　　$\frac{5}{10}$　　　　$\frac{10}{10}$

0.0　　　　0.5　　　　1.0

_____

2.

$2\frac{0}{10}$　　　　$2\frac{5}{10}$　　　　$2\frac{10}{10}$

2.0　　　　2.5　　　　3.0

_____
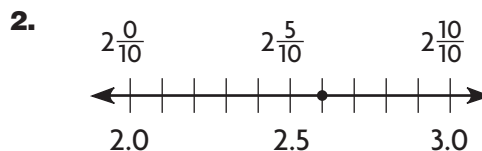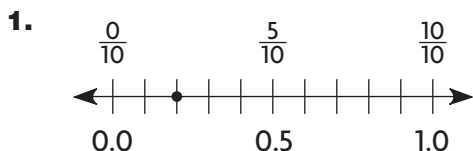
Name _____

Relate Hundredths and Decimals

Write the fraction or mixed number and the decimal shown by the model.

Step 1 Count the number of shaded squares in the model and the total number of squares in the whole model.	Number of shaded squares: **53** Total number of squares: **100**
Step 2 Write a fraction to represent the part of the model that is shaded.	$\dfrac{\text{Number of Shaded Squares}}{\text{Total Number of Squares}} = \dfrac{53}{100}$ The fraction shown by the model is $\dfrac{53}{100}$.
Step 3 Write the fraction in decimal form.	**Think:** The fraction shown by the model is $\dfrac{53}{100}$. **0.53** names the same amount as $\dfrac{53}{100}$. The decimal shown by the model is **0.53**.
The fraction and decimal shown by the model are $\dfrac{53}{100}$ and **0.53**.	

Write the fraction or mixed number and the decimal shown by the model.

1.
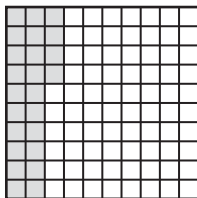
2.

_____   _____
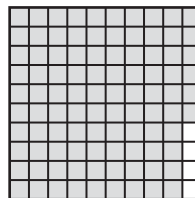
Name _____

Equivalent Fractions and Decimals

Lori ran $\frac{20}{100}$ mile. How many tenths of a mile did she run?

Write $\frac{20}{100}$ as an equivalent fraction with a denominator of 10.

Step 1 **Think:** 10 is a common factor of the numerator and the denominator.

Step 2 Divide the numerator and denominator by 10.

$$\frac{20}{100} = \frac{20 \div 10}{100 \div 10} = \frac{2}{10}$$

So, Lori ran $\frac{2}{10}$ mile.

Use a place-value chart.

Step 1 Write $\frac{20}{100}$ as an equivalent decimal.

Ones	▪	Tenths	Hundredths
0	▪	2	0

Step 2 **Think:** 20 hundredths is __2__ tenths __0__ hundredths

Ones	▪	Tenths
0	▪	2

So, Lori ran **0.2** mile.

Write the number as hundredths in fraction form and decimal form.

1. $\frac{9}{10}$

2. 0.6

3. $\frac{4}{10}$

_____   _____   _____

Write the number as tenths in fraction form and decimal form.

4. $\frac{70}{100}$

5. $\frac{80}{100}$

6. 0.50

_____   _____   _____

Name _____

Relate Fractions, Decimals, and Money

Write the total money amount. Then write the amount as a fraction and as a decimal in terms of a dollar.

Step 1 Count the value of coins from greatest to least. Write the total money amount.

$0.25 ⟶ $0.35 ⟶ $0.40 ⟶ $0.45 ⟶ $0.50

Step 2 Write the total money amount as a fraction of a dollar.

The total money amount is $0.50, which is the same as 50 cents.

Think: There are 100 cents in a dollar.

So, the total amount written as a fraction of a dollar is:

$$\frac{50 \text{ cents}}{100 \text{ cents}} = \frac{50}{100}$$

Step 3 Write the total money amount as a decimal.

Think: I can write $0.50 as 0.50.

The total money amount is $\frac{50}{100}$ written as a fraction of a dollar, and 0.50 written as a decimal.

Write the total money amount. Then write the amount as a fraction or a mixed number and as a decimal in terms of a dollar.

1.

2.

_____   _____

Name _____

Problem Solving • Money

Use the strategy *act it out* to solve the problem.

Jessica, Brian, and Grace earned $7.50. They want to share
the money equally. How much will each person get?

Read the Problem	Solve the Problem
What do I need to find? I need to find the <u>amount of money</u> <u>each person should get</u>.	• Show the total amount, <u>$7.50</u>, using <u>7</u> one-dollar bills and <u>2</u> quarters.
What information do I need to use? I need to use the total amount, <u>$7.50</u>, and divide it by <u>3</u>, the number of people sharing the money equally.	• Share the one-dollar bills equally. There is <u>1</u> one-dollar bill left.
How will I use the information? I will use <u>dollar bills and coins</u> to model the total amount and <u>act out the problem</u>.	• Change the dollar bill that is left for <u>4</u> quarters. Now there are <u>6</u> quarters. • Share the quarters equally. So, each person gets <u>2</u> one-dollar bills and <u>2</u> quarters, or <u>$2.50</u>.

1. Jacob, Dan, and Nathan were given
   $6.90 to share equally. How much
   money will each boy get?

2. Becky, Marlis, and Hallie each earned
   $2.15 raking leaves. How much did
   they earn together?

_____   _____

Add Fractional Parts of 10 and 100

Sam uses 100 glass beads for a project. Of the beads, $\frac{35}{100}$ are gold and $\frac{4}{10}$ are silver. What fraction of the glass beads are gold or silver?

Add $\frac{35}{100}$ and $\frac{4}{10}$.

Step 1 Decide on a common denominator. Use __100__.

Step 2 Write $\frac{4}{10}$ as an equivalent fraction with a denominator of 100.

$$\frac{4}{10} = \frac{4 \times 10}{10 \times 10} = \frac{40}{100}$$

Step 3 Add $\frac{35}{100}$ and $\frac{40}{100}$.

$$\frac{35}{100} + \frac{40}{100} = \frac{75}{100}$$ ⟵ Add the numerators.
⟵ Use 100 as the denominator.

So, $\frac{75}{100}$ of the glass beads are gold or silver.

Add $0.26 and $0.59.

Step 1 Write each amount as a fraction of a dollar.

$0.26 = $\frac{26}{100}$ of a dollar $0.59 = $\frac{59}{100}$ of a dollar

Step 2 Add $\frac{26}{100}$ and $\frac{59}{100}$.

$$\frac{26}{100} + \frac{59}{100} = \frac{85}{100}$$ ⟵ Add the numerators.
⟵ 100 is the common denominator.

Step 3 Write the sum as a decimal.

$$\frac{85}{100} = 0.85$$

So, $0.26 + $0.59 = __$0.85__.

Find the sum.

1. $\frac{75}{100} + \frac{2}{10} =$ _____

2. $0.73 + $0.25 = $ _____

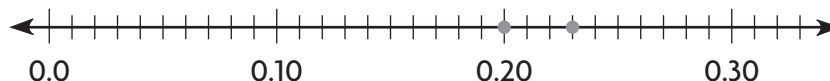$$\frac{73}{100} + \frac{25}{100} = \frac{\quad}{\quad}$$

Name _____

Compare Decimals

Alfie found 0.2 of a dollar and Gemma found 0.23 of a dollar.
Which friend found more money?

To compare decimals, you can use a number line.

Step 1 Locate each decimal on a number line.

0.0   0.10   0.20   0.30

Step 2 The number farther to the right is greater.

$0.23 > 0.2$, so __Gemma__ found more money.

To compare decimals, you can compare equal-size parts.

Step 1 Write 0.2 as a decimal in hundredths.

0.2 is 2 tenths, which is equivalent to __20__ hundredths.

$0.2 = $ __0.20__

Step 2 Compare.

23 hundredths _is greater than_ 20 hundredths,
so $0.23 > 0.2$.

So, __Gemma__ found more money.

Compare. Write $<$, $>$, or $=$.

1. 0.17 ◯ 0.13   **2.** 0.8 ◯ 0.08   **3.** 0.36 ◯ 0.63   **4.** 0.4 ◯ 0.40

5. 0.75 ◯ 0.69   **6.** 0.3 ◯ 0.7   **7.** 0.45 ◯ 0.37   **8.** 0.96 ◯ 0.78