Name $\qquad$


1. Write a number sentence and draw a number bond to show the shaded part.

2. 



Name $\qquad$ Date $\qquad$


1. Circle each addend on the tape diagram to show how the fraction is decomposed.
a. $\quad 1=\frac{1}{5}+\frac{1}{5}+\frac{1}{5}+\frac{1}{5}+\frac{1}{5}$

$$
1 \text { whole }=\frac{5}{5}
$$


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


Name $\qquad$

Step 1：Shade a tape diagram of the given fraction．
Step 2：Record the decomposition as a sum of fractions in two different ways．

$$
1 \text { whole }=\frac{6}{6}
$$


$\frac{4}{6}=$

Name $\qquad$


1. Write each fraction as a sum of unit fractions.

Write the equivalent multiplication sentence.
a.


Sum of unit fractions: $\qquad$
Multiplication Sentence:

$$
\frac{2}{3}=\ldots \quad \text { groups of } \quad \_\quad=
$$

b.

1 whole


Sum of unit fractions: $\qquad$
Multiplication Sentence:
$\qquad$
2. Write a number sentence showing the fraction as multiplying the unit fraction.

$$
\frac{6}{9}=\ldots \quad \text { groups of } \quad \_\quad=
$$

Name $\qquad$


1. The total length of the tape diagram represents 1 whole. Decompose the shaded unit fraction as the sum of smaller unit fractions in two different ways.
(Draw dotted lines to decompose the pieces.)

$\qquad$ = $\qquad$
$\qquad$ = $\qquad$
2. Draw and label a tape diagram to prove the following statement.

$$
\frac{2}{3}=\frac{4}{6}
$$



Name $\qquad$


1. Draw horizontal lines to decompose each rectangle into the number of rows given. Show the shaded area as both a sum of unit fractions and as a multiplication sentence.

2 rows
= Equivalent Fractions: $\frac{1}{4}=$ $\qquad$


+ Sum of unit fractions: $\frac{1}{4}=$ $\qquad$


## X Multiplication Sentence:

$$
\frac{1}{4}==\quad \text { groups of } \longrightarrow \frac{1}{4}=
$$

$\qquad$ X $\qquad$
2. Show the fraction as a sum of unit fractions and as a multiplication sentence.

$$
\frac{1}{5}=\frac{2}{10}
$$

+ Sum of unit fractions:
$\frac{1}{5}=$ $\qquad$

X Multiplication:
$\frac{1}{5}==$ $\qquad$ groups of $\qquad$ $\longrightarrow \frac{1}{5}=$ $\qquad$ X $\qquad$

Name $\qquad$


1. Decompose the rectangle into eighths. Write the equivalent fractions as both a sum of unit fractions and as a multiplication sentence.

= Equivalent Fractions: $\qquad$ $=$ $\qquad$

X Multiplication sentence: $\qquad$

$$
\frac{3}{4}=\left(\__{\square}\right)+\left(\__{\square}\right)+\left({ }_{\square}\right)=
$$

2. Show the decomposition represented by the number sentence below.

$$
\begin{aligned}
& \frac{3}{5}=\frac{6}{10} \\
& \frac{3}{5}=(\square \quad)+(\square \quad, \quad
\end{aligned}
$$

Name $\qquad$

1. Shade in pictures to show the fractions.
a. 2 feet equal what fraction of a yard?

2 feet $=$ $\qquad$ yard

## 1 yard

|  |  |  |
| :--- | :--- | :--- |

b. 9 inches equal what fraction of a foot? 9 inches $=$ $\qquad$ foot

## 1 foot

|  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

2. Write the fractions that belong in the blanks.
a. 1 inch equals what fraction of a foot? 1 inch $=$ $\qquad$ foot
b. 1 inch equals what fraction of a yard?

1 inch = $\qquad$ yard
c. 1 foot equals what fraction of a yard?

1 foot = $\qquad$ yard

Name $\qquad$


1. Fill in the blanks.
a. $\quad 1$ pound = $\qquad$ ounces
b. 1 ounce is $\qquad$ of a pound
2. Shade in the tape diagram to show how ounces relate to pounds.

8 ounces = $\qquad$ of a pound


|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

4. Show the shaded portion as ounces in unit form AND as a fraction of a pound.

Unit form: $\qquad$ Fraction of a pound: $\qquad$

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Name $\qquad$

1. Fill in the blanks.
a. $\quad 1$ gallon $=$ $\qquad$ quarts
b. $\quad 1$ gallon $=$ $\qquad$ pints
2. Shade in the area models to show how capacity relates to fractions.
a. 10 cups $=$ $\qquad$ of a gallon
b. 3 cups $=$ $\qquad$ of a quart

| $\mathbf{1}$ |
| :---: |
| gallon |


| cup | cup | cup | cup |
| :--- | :--- | :--- | :--- |
| cup | cup | cup | cup |
| cup | cup | cup | cup |
| cup | cup | cup | cup |

quart



Name $\qquad$

1. Plot the following points on the number lines.
a. $\frac{8}{10}$

b. $\frac{3}{5}$

c. $\frac{1}{4}$

d. $\frac{1}{2}$

2. Use the number lines in Problem 1 to compare the fractions by writing $>,<$, or $=$.
a. $\frac{1}{4} \longrightarrow \frac{1}{2}$
b. $\frac{8}{10} \longrightarrow \frac{3}{5}$
c. $\frac{1}{2} \longrightarrow \frac{3}{5}$
d. $\frac{1}{4} \longrightarrow-\frac{8}{10}$


Name $\qquad$

1. Place the following fractions on the number lines.
a. $\frac{5}{4}$

b. $\frac{10}{7}$

C. $\frac{16}{9}$

2. Use the number lines to compare the fractions using $>,<$, or $=$.
a. $\frac{5}{4} \longrightarrow \frac{10}{7}$
b. $\frac{5}{4}-\frac{16}{9}$
C. $\frac{16}{9} \longrightarrow \frac{10}{7}$

Name $\qquad$

1．Since $\frac{1}{3} \longrightarrow \frac{1}{6}$ then $\frac{2}{3} \longrightarrow \frac{2}{6}$

2．Shade in tape diagrams to compare the following fractions：


3．Use number lines to compare the following fractions：


Name $\qquad$

1. Draw an area model for each fraction to make like denominators. Compare the two fractions by writing $>,<$, or $=$ on the line.

2. Rename the fractions, as needed in order to compare by writing $>,<$, or $=$.


Name $\qquad$


1. Find the sum.
$\frac{2}{8}+\frac{4}{8}=$ $\qquad$

2. Find the difference.

$$
\frac{8}{10}-\frac{3}{10}=
$$

$\qquad$


Name $\qquad$ Date $\qquad$


1. Find the difference
a. $\frac{6}{9}-\frac{5}{9}=$
b. $\frac{5}{6}-\frac{3}{6}=$ $\qquad$
2. Find the sum.
a. $\frac{5}{12}+\frac{10}{12}=$ $\qquad$ b. $\frac{6}{8}+\frac{2}{8}=$ $\qquad$
3. Write True or False.
a. The sum for Problem 2a above is greater than 1 whole. $\qquad$
b. The sum for Problem 2b above is equal to 1 whole. $\qquad$

Name $\qquad$


1. Find the sum by adding on the number line.

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


2. Find the difference by counting up on the number line.
a. $1 \frac{2}{8}-\frac{5}{8}=$ $\qquad$

b. $1 \frac{2}{4}-\frac{3}{4}=$ $\qquad$


Name $\qquad$


Shade in tape diagrams to solve.

1. Mrs. Smith took her bird to the vet. Tweety weighed $1 \frac{3}{10}$ pounds. The vet said that Tweety weighed $\frac{4}{10}$ pound more than last year. How much did Tweety weigh last year?

1 pound
$\square|\square| \square \mid \square$

|  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

2. Hudson picked $1 \frac{1}{4}$ baskets of apples. Suzy picked 2 baskets of apples. What fraction of a basket more did Suzy pick than Hudson?


Name $\qquad$


Multiply and write the product as a mixed number. Use a number line to support your answer.

1. $8 \times \frac{1}{2}=$ $\qquad$

2. 7 copies of 1 fourth $=$ $\qquad$

3. $13 \times \frac{1}{3}=$ $\qquad$


Name $\qquad$

1. Rename the fraction as a mixed number by decomposing it into two parts. Model the decomposition with a number bond.

b. $\frac{15}{3}=$ $\qquad$ $+$ $\qquad$ $=$ $\qquad$

C. $\frac{11}{4}=$ $\qquad$ $+$ $\qquad$ $=$ $\qquad$

Name $\qquad$
Use a number line to convert each mixed number to a fraction greater than 1.

1. $3 \frac{1}{5}=$

2. $2 \frac{3}{5}=$ $\qquad$


Use any strategy to convert the mixed number into an improper fraction.
3. $4 \frac{2}{9}=$ $\qquad$

Name $\qquad$

1. Mr. O'Neil asked his students to record the length of time in hours that they read over the weekend. The times are listed in the table. Make a line plot of the data.

| Student | Robin | Bill | Katrina | Kelly | Marty | Gail | Scott | Ben |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Time | $\frac{2}{4}$ | 1 | $\frac{3}{4}$ | $1 \frac{3}{4}$ | $1 \frac{2}{4}$ | $2 \frac{1}{4}$ | $1 \frac{3}{4}$ | $2 \frac{2}{4}$ |


2. One of the students read $\frac{3}{4}$ hour on Friday, $\frac{3}{4}$ hour on Saturday, and $\frac{3}{4}$ hour on Sunday. Add these fractions on the number line.


How many hours did that student read over the weekend? $\qquad$ Look at the chart to name the student that read this much. $\qquad$

Name
Solve.

1. Fill in the missing number. $3 \frac{2}{5}+\ldots=4$
2. $2 \frac{3}{8}+\frac{7}{8}=$


Name $\qquad$


Add the whole numbers. Add the fractions. Combine your answers.
a. $2 \frac{3}{8}+1 \frac{5}{8}$
b. $3 \frac{4}{5}+2 \frac{3}{5}$

Name

$\qquad$

Solve.

1. $4 \frac{1}{5}-\frac{4}{5}=$ $\qquad$

2. $8 \frac{3}{8}-\frac{6}{8}=$ $\qquad$


Name $\qquad$

1. Write a related addition sentence. Use the number line to subtract by counting on

$$
4 \frac{2}{3}-2 \frac{1}{3}=
$$

$\qquad$

2. Subtract by decomposing the total.

$$
8 \frac{5}{8}-6 \frac{7}{8}=
$$

$\qquad$


Name


1. Solve using unit form.

$$
5 \times \frac{2}{3}=\ldots \quad x \ldots \text { thirds }=\ldots \ldots \text { thirds }
$$

2. Solve. Write the final answer as a fraction.
$10 \times \frac{5}{6}=$
$\qquad$ x $\qquad$ sixths $=$ $\qquad$ sixths


Name $\qquad$
Solve.

1. $4 \times \frac{3}{4}=\frac{3}{4}+\frac{3}{4}+\frac{3}{4}+\frac{3}{4}=$
2. $3 \times \frac{2}{5}=\frac{2}{5}+\frac{2}{5}+\frac{2}{5}=$
3. $4 \times \frac{5}{8}=$

Name $\qquad$ Date $\qquad$
Multiply．Write each product as a mixed number．

1． $4 \times 5 \frac{1}{8}=$

2． $4 \times 3 \frac{2}{10}=$

Name $\qquad$


Coach Taylor asked his team to record the distance they ran during practice. The distances are listed in the table.

1. Use the table to locate the incorrect data on the line plot. Circle any incorrect points.
Mark any missing points.


| Team <br> Members | Distance <br> (in miles) |
| :---: | :---: |
| Alec | $1 \frac{6}{8}$ |
| Henry | $1 \frac{4}{8}$ |
| Charles | $2 \frac{1}{8}$ |
| Steve | $1 \frac{6}{8}$ |
| Pitch | $2 \frac{4}{8}$ |
| Raj | $1 \frac{6}{8}$ |
| Pam | $2 \frac{4}{8}$ |
| Tony | $1 \frac{3}{8}$ |

Name


Find the sums.

$$
\text { 1. } \frac{0}{13}+\frac{1}{13}+\frac{2}{13}+\ldots \frac{13}{13}
$$

2. $\frac{0}{12}+\frac{1}{12}+\frac{2}{12}+\cdots \frac{12}{12}$

Name


Complete the conversion tables. Describe the rule.
a.

| Gallons | Quarts |
| :---: | :---: |
| 1 |  |
| 2 |  |
| 3 |  |
|  | 16 |

Rule: $\qquad$

| Gallons | Pints |
| :---: | :---: |
| 1 |  |
| 2 |  |
| 3 |  |
|  | 32 |

Rule: $\qquad$

