

7-1
Homework

Name _____

Date _____

Write $>$ or $<$ to make each statement true.

1 $\frac{1}{5}$ ○ $\frac{1}{4}$

2 $\frac{6}{10}$ ○ $\frac{5}{10}$

3 $\frac{4}{10}$ ○ $\frac{4}{12}$

4 $\frac{3}{5}$ ○ $\frac{4}{5}$

5 $\frac{3}{6}$ ○ $\frac{3}{8}$

6 $\frac{7}{100}$ ○ $\frac{8}{100}$

Solve. Explain your answers.

Show your work.

- 7 Juan took $\frac{2}{12}$ of the fruit salad and Harry took $\frac{3}{12}$ of the same salad. Who took more of the salad?

- 8 Kim drank $\frac{1}{3}$ of a carton of milk. Joan drank $\frac{1}{4}$ of a carton. Who drank more?

- 9 Maria read $\frac{3}{8}$ of a story. Darren read $\frac{3}{6}$ of the same story. Who read more of the story?

- 10 Write 2 things you learned today about comparing fractions.

- 11 Write and solve a fraction word problem of your own.

Divide.

① $6 \overline{)273}$

② $2 \overline{)1,935}$

③ $7 \overline{)812}$

Write = or \neq to make each statement true.

④ $16 - 4 \bigcirc 2$

⑤ $20 + 8 \bigcirc 30 - 2$

⑥ $9 - 4 \bigcirc 12$

⑦ $48 \bigcirc 24 + 24$

⑧ $50 + 3 + 8 \bigcirc 71$

⑨ $13 + 15 \bigcirc 15 + 13$

Solve each equation.

⑩ $18 \div s = 9$
 $s = \underline{\hspace{2cm}}$

⑪ $m = 8 \times 4$
 $m = \underline{\hspace{2cm}}$

⑫ $p \div 10 = 7$
 $p = \underline{\hspace{2cm}}$

⑬ $t \times 12 = 60$
 $t = \underline{\hspace{2cm}}$

⑭ $3 \times y = 18$
 $y = \underline{\hspace{2cm}}$

⑮ $j = 42 \div 6$
 $j = \underline{\hspace{2cm}}$

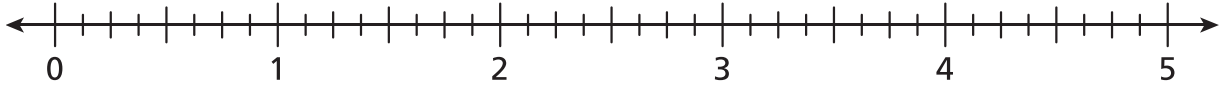
- ⑯ **Stretch Your Thinking** Ellen, Fern, and Kyle are all drinking milk from the same size cartons in the cafeteria. Ellen's carton is $\frac{3}{7}$ full. Fern's carton is $\frac{3}{10}$ full. Kyle's carton is $\frac{3}{4}$ full. Who has the least milk left in their carton? Explain how you know.

7-2 Homework

Name _____

Date _____

- 1 Use the number line to compare the fractions or mixed numbers. Write $>$ or $<$ to make the statement true.



a. $\frac{3}{4} \bigcirc \frac{5}{8}$

b. $1\frac{1}{4} \bigcirc \frac{3}{2}$

c. $\frac{9}{4} \bigcirc 2\frac{1}{2}$

d. $\frac{7}{2} \bigcirc \frac{17}{8}$

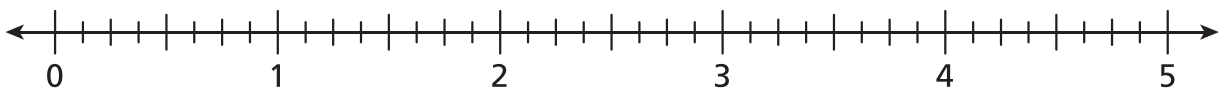
e. $4\frac{2}{4} \bigcirc 4\frac{5}{8}$

f. $4\frac{1}{2} \bigcirc \frac{33}{8}$

g. $1\frac{3}{4} \bigcirc 1\frac{7}{8}$

h. $1\frac{1}{2} \bigcirc 1\frac{1}{8}$

- 2 Mark and label the letter of each fraction or mixed number on the number line.



a. $\frac{3}{8}$

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

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

d. $2\frac{1}{8}$

e. $2\frac{7}{8}$

f. $3\frac{1}{4}$

g. $3\frac{5}{8}$

h. $4\frac{2}{4}$

i. $4\frac{6}{8}$

j. $4\frac{7}{8}$

The list below shows the amount of fruit purchased from the market.

Fruit Purchases (lb = pounds)

| | |
|--------------------------|----------------------------|
| apples $2\frac{1}{8}$ lb | bananas $2\frac{3}{8}$ lb |
| grapes $2\frac{2}{3}$ lb | oranges $3\frac{1}{10}$ lb |

- 3 Decide if each weight is closer to 2 pounds, $2\frac{1}{2}$ pounds, or 3 pounds. Write *closer to 2 pounds*, *closer to $2\frac{1}{2}$ pounds*, or *closer to 3 pounds*.

a. apples _____

b. bananas _____

c. grapes _____

d. oranges _____

- 4 Which purchase had a greater weight?

a. apples or grapes _____

b. oranges or bananas _____

Solve, using any method.

1 $8 \overline{)1,219}$

2 $3 \overline{)7,149}$

3 $4 \overline{)4,038}$

Solve each comparison problem.

- 4 Mateo read 2,382 pages in a book series over the summer. This is 3 times the number of pages as his younger brother read over the summer. How many pages did Mateo's brother read over the summer?

- 5 In Jen's town, there was 9 inches of snow in a year. In her cousin's town, there was 216 inches of snow in the same year. How many times the number of inches of snow was there in the cousin's town as in Jen's town?

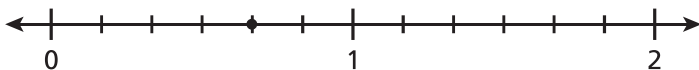
Write $<$ or $>$ to make each statement true.

6 $\frac{2}{5} \bigcirc \frac{4}{5}$

7 $\frac{1}{8} \bigcirc \frac{3}{8}$

8 $\frac{4}{5} \bigcirc \frac{4}{6}$

- 9 **Stretch Your Thinking** Dakota says the point on the number line shown here is $\frac{4}{5}$. His teacher says that he is reading the number line incorrectly. What is Dakota's error? What is the correct fraction?



- 1 Draw a small square, a medium square, and a large square. Shade $\frac{1}{6}$ of each.

- 2 Draw a small circle, a medium circle, and a large circle. Shade $\frac{3}{4}$ of each.

- 3 Draw a short rectangle, a medium rectangle, and a long rectangle. Shade $\frac{3}{5}$ of each.

- 4 Look at the different size shapes you shaded in Problems 1–3. Describe what they show about fractions of different wholes.

Solve.

Show your work.

- 5 Kris ate $\frac{3}{8}$ of a pizza and Kim ate $\frac{4}{8}$ of the same pizza. Did they eat the whole pizza? Explain.

- 6 Amena ate $\frac{1}{2}$ of a sandwich. Lavonne ate $\frac{1}{2}$ of a different sandwich. Amena said they ate the same amount. Lavonne said Amena ate more. Could Lavonne be correct? Explain your thinking.

Add or subtract.

$$\begin{array}{r} \textcircled{1} \quad 8,159 \\ + 2,713 \\ \hline \end{array}$$

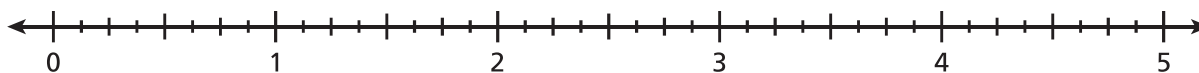
$$\begin{array}{r} \textcircled{2} \quad 54,992 \\ + 8,317 \\ \hline \end{array}$$

$$\begin{array}{r} \textcircled{3} \quad 625,000 \\ - 139,256 \\ \hline \end{array}$$

Use an equation to solve.

- 4** Chad harvested 39 potatoes from his garden. He kept 11 for himself and shared the remaining potatoes evenly among his 4 neighbors. How many potatoes did each neighbor get?
- _____

- 5** Mark and label the point for each fraction or mixed number with its letter.



- a. $3\frac{1}{8}$ b. $1\frac{2}{4}$ c. $\frac{3}{4}$ d. $4\frac{7}{8}$ e. $2\frac{1}{8}$
- f. $\frac{5}{8}$ g. $2\frac{1}{4}$ h. $1\frac{3}{8}$ i. $3\frac{6}{8}$ j. $4\frac{1}{2}$

- 6** **Stretch Your Thinking** Raylene made a bracelet with 28 beads. She also made a necklace with twice the number of beads as the bracelet. If $\frac{1}{2}$ of the beads on the bracelet are green and $\frac{1}{4}$ of the beads on the necklace are green, does the bracelet, the necklace, or neither have more green beads? Explain.
- _____
- _____
- _____
- _____

Use the fraction strips to show how each pair is equivalent.

1 $\frac{1}{3}$ and $\frac{2}{6}$



$$\frac{1}{3} = \frac{1 \times \square}{3 \times \square} = \frac{2}{6}$$

2 $\frac{3}{4}$ and $\frac{9}{12}$



$$\frac{3}{4} = \frac{3 \times \square}{4 \times \square} = \frac{9}{12}$$

3 $\frac{2}{5}$ and $\frac{4}{10}$



$$\frac{2}{5} = \frac{2 \times \square}{5 \times \square} = \frac{4}{10}$$

4 $\frac{2}{4}$ and $\frac{6}{12}$



$$\frac{2}{4} = \frac{2 \times \square}{4 \times \square} = \frac{6}{12}$$

Complete to show how the fractions are equivalent.

5 $\frac{5}{6}$ and $\frac{35}{42}$

$$\frac{5}{6} = \frac{5 \times \square}{6 \times \square} = \frac{35}{42}$$

6 $\frac{4}{10}$ and $\frac{40}{\square}$

$$\frac{4}{10} = \frac{4 \times 10}{10 \times \square} = \frac{\square}{\square}$$

Complete.

7 $\frac{4}{5} = \frac{4 \times \square}{5 \times \square} = \frac{\square}{45}$

8 $\frac{2}{5} = \frac{2 \times \square}{5 \times \square} = \frac{\square}{40}$

9 $\frac{3}{8} = \frac{3 \times \square}{8 \times \square} = \frac{18}{\square}$

Solve. Then explain the meaning of the remainder.

- 1 Doris is putting together gift bags. She has 53 favors to divide evenly among gift bags for 7 guests. How many favors will each guest get?

Solve each problem.

2 $2 \times 9 + 5 = r$

3 $36 \div (20 - 8) = t$

Solve.

- 4 Mattie and Leah each bought an ice cream cone for the same price. Mattie said it cost her $\frac{2}{3}$ of her allowance. Leah said it cost her $\frac{1}{3}$ of her allowance. Who gets more allowance? Explain.

- 5 **Stretch Your Thinking** Omar cuts a pizza into 4 slices and takes 3 of the slices. He says that he would have the same amount of pizza if he cut the pizza into 8 slices and takes 6 of the slices. Paul says he can cut the pizza into 16 slices and take 12 slices to have the same amount. Who is correct? Explain.

7-5 Homework

Name _____

Date _____

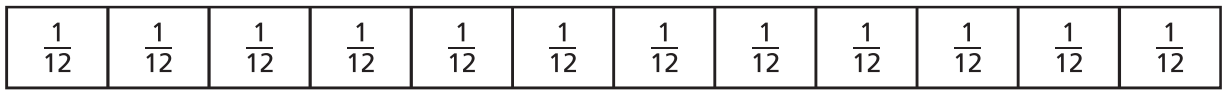
Shade the fraction bar to show the fraction of items sold. Group the unit fractions to form an equivalent fraction in simplest form. Show your work numerically.

- 1 The manager of Fantasy Flowers made 8 bouquets of wild flowers. By noon, she sold 2 of the bouquets. What fraction did she sell?



Group size: _____ Fraction of bouquets sold: $\frac{2 \div}{8 \div} =$ _____

- 2 A car dealer had 12 red cars on his lot at the beginning of the month. The first week he sold 8 of them. What fraction did he sell that week?



Group size: _____ Fraction of red cars sold: $\frac{8 \div}{12 \div} =$ _____

- 3 A music store received 10 copies of a new CD. They sold 6 of them in the first hour. What fraction did the store sell in the first hour?



Group size: _____ Fraction of CDs sold: $\frac{6 \div}{10 \div} =$ _____

Simplify each fraction.

4 $\frac{8 \div}{10 \div} =$ _____

5 $\frac{6 \div}{12 \div} =$ _____

6 $\frac{25 \div}{100 \div} =$ _____

7 $\frac{4 \div}{8 \div} =$ _____

Tell whether 4 is a factor of each number. Write *yes* or *no*.

① 12

② 20

③ 10

④ 26

Tell whether each number is a multiple of 3. Write *yes* or *no*.

⑤ 15

⑥ 32

⑦ 27

⑧ 25

Name the fraction for each sum of unit fractions.

⑨ $\frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8} =$ _____

⑩ $\frac{1}{12} + \frac{1}{12} + \frac{1}{12} + \frac{1}{12} + \frac{1}{12} + \frac{1}{12} =$ _____

⑪ $\frac{1}{9} + \frac{1}{9} + \frac{1}{9} + \frac{1}{9} + \frac{1}{9} + \frac{1}{9} + \frac{1}{9} =$ _____

Complete.

⑫ $\frac{3}{5} = \frac{3 \times \boxed{}}{5 \times \boxed{}} = \frac{21}{\boxed{}}$

⑬ $\frac{2}{9} = \frac{2 \times \boxed{}}{9 \times \boxed{}} = \frac{\boxed{}}{36}$

⑭ $\frac{5}{6} = \frac{5 \times \boxed{}}{6 \times \boxed{}} = \frac{15}{\boxed{}}$

⑮ **Stretch Your Thinking** Explain two different ways to simplify $\frac{6}{12}$.

7-6 Homework

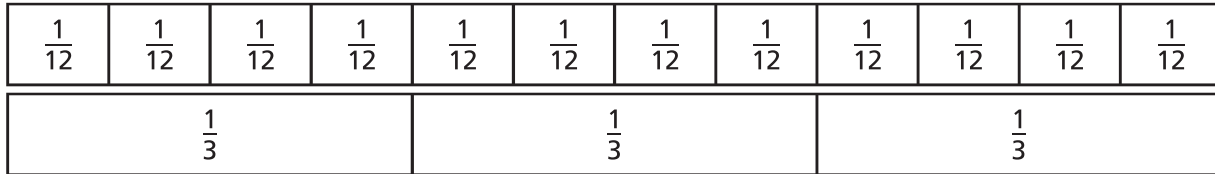
Name _____

Date _____

- 1 Use the fraction strips to compare the fractions

$\frac{7}{12}$ and $\frac{2}{3}$.

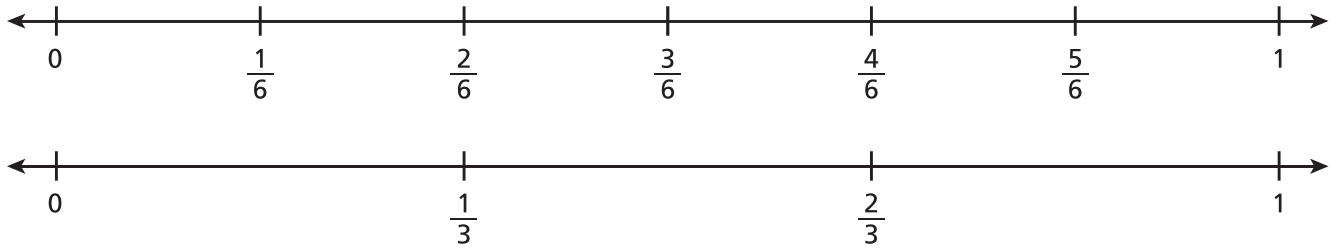
$$\frac{7}{12} \bigcirc \frac{2}{3}$$



- 2 Use the number lines to compare the fractions

$\frac{5}{6}$ and $\frac{2}{3}$.

$$\frac{5}{6} \bigcirc \frac{2}{3}$$



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

3 $\frac{1}{6} \bigcirc \frac{3}{5}$

4 $\frac{7}{8} \bigcirc \frac{3}{4}$

5 $\frac{1}{4} \bigcirc \frac{3}{10}$

6 $\frac{7}{10} \bigcirc \frac{5}{8}$

7 $\frac{2}{3} \bigcirc \frac{1}{2}$

8 $\frac{2}{5} \bigcirc \frac{7}{10}$

Write a number sentence to answer each question.

- 1 How many meters are equal to 58 kilometers?

- 2 How many millimeters are equal to 17 centimeters?

Name the fraction that will complete each equation.

3 $1 = \frac{4}{4} = \frac{1}{4} +$ _____

4 $1 = \frac{8}{8} = \frac{2}{8} +$ _____

5 $1 = \frac{6}{6} = \frac{1}{6} +$ _____

Simplify each fraction.

6 $\frac{12 \div \square}{15 \div \square} =$ _____

8 $\frac{48 \div \square}{56 \div \square} =$ _____

7 $\frac{28 \div \square}{36 \div \square} =$ _____

9 $\frac{15 \div \square}{40 \div \square} =$ _____

- 10 **Stretch Your Thinking** Kathleen, Penny, and Megan all order 12-ounce smoothies. After 5 minutes, Kathleen still has $\frac{3}{4}$ left, Penny has $\frac{5}{6}$ left, and Megan has $\frac{5}{8}$ left. Who has the least amount of smoothie in their cup? Who has the greatest? Explain.

7-7 Homework

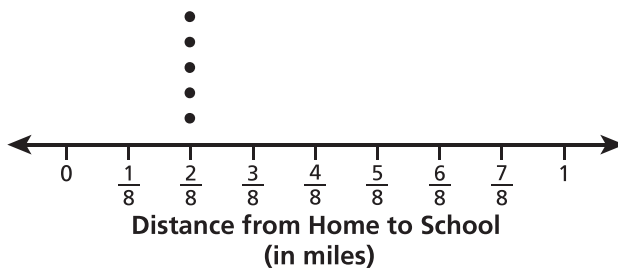
Name _____

Date _____

Tyler asked his classmates the distance in miles from their home to the school. The distances they named are shown in the table.

| Distance from Home to School (in miles) | Number of Students |
|---|--------------------|
| $\frac{2}{8}$ | 5 |
| $\frac{3}{8}$ | 3 |
| $\frac{4}{8}$ | 4 |
| $\frac{5}{8}$ | 5 |
| $\frac{6}{8}$ | 3 |
| $\frac{7}{8}$ | 7 |

- 1 Make a line plot of the data.



- 2 How many students did Tyler ask in all? Explain how you know.

- 3 Find the difference between the greatest distance and the least distance.

- 4 Layla lives the least distance from the school. Her friend Geneva lives $\frac{3}{8}$ mile from her. Geneva walked to Layla's house. Then the two girls walked to school together. How far did Geneva walk altogether?

Complete.

- 1 How many liters are equal to 39 kiloliters? _____
- 2 How many milligrams are equal to 4 centigrams? _____

Solve.

3 $\frac{5}{9} + \frac{2}{9} =$ _____

4 $\frac{4}{6} - \frac{1}{6} =$ _____

5 $\frac{10}{11} - \frac{3}{11} =$ _____

Use a common denominator to compare the fractions.

Write $<$, $=$, or $>$ to make a true statement.

6 $\frac{9}{10} \bigcirc \frac{2}{3}$

7 $\frac{5}{8} \bigcirc \frac{3}{5}$

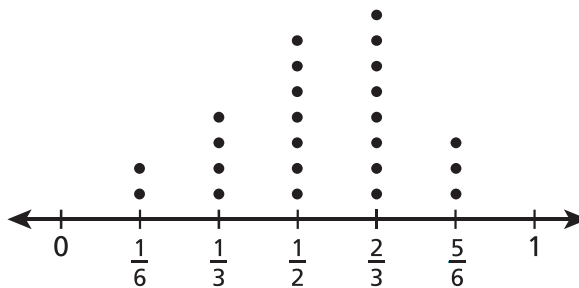
8 $\frac{2}{3} \bigcirc \frac{5}{6}$

9 $\frac{4}{14} \bigcirc \frac{2}{7}$

10 $\frac{4}{5} \bigcirc \frac{4}{10}$

11 $\frac{6}{8} \bigcirc \frac{5}{6}$

- 12 **Stretch Your Thinking** Mr. Brady asked his students how long it took each of them to complete their homework from the previous night. He presented the results in the line plot shown. How many minutes did the greatest number of students take to do their homework? How many combined hours did those particular students spend on homework? Explain.



Time on Homework (in hours)
