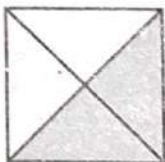


Name _____

4. The model shows one whole. What fraction of the model is NOT shaded?


 $\frac{2}{4}$ or $\frac{1}{2}$

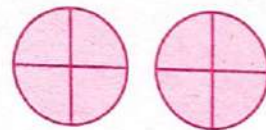
5. Gary paints some shapes.



Select one number from each column to show a fraction greater than 1 that names the parts Gary painted.

Numerator	Denominator
<input type="radio"/> 3	<input type="radio"/> 3
<input type="radio"/> 4	<input type="radio"/> 4
<input type="radio"/> 8	<input checked="" type="radio"/> 8
<input checked="" type="radio"/> 24	<input type="radio"/> 24

6. Angelo rode his bike around a bike trail that was $\frac{1}{4}$ of a mile long. He rode his bike around the trail 8 times. Angelo says he rode a total of $\frac{8}{4}$ miles. Teresa says he is wrong and that he actually rode 2 miles. Who is correct? Use words and drawings to explain how you know.



Both are correct. Possible explanation: The distance around the trail is $\frac{1}{4}$ mile, so if he rode around it 8 times, that is eight fourths or $\frac{8}{4}$. I drew a circle, divided it in fourths, and shaded $\frac{4}{4}$. I then drew another circle and shaded it the same to show $\frac{8}{4}$. My drawing shows that $\frac{8}{4} = 2$, so he rode 2 miles.



Name _____

Practice Test

Learning Objective

Recognize and generate equivalent fractions, and explain why the fractions are equivalent using a model.

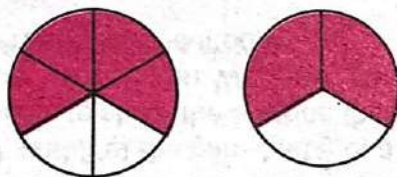
1. Joe and Shelby are having lunch. Joe eats $\frac{3}{4}$ of his sub sandwich. Shelby eats an equivalent amount of her sub sandwich. Use the top rectangle to show how much of his sandwich Joe ate. Use the bottom rectangle to show how much of her sandwich Shelby ate.



What fraction is equivalent to $\frac{3}{4}$?

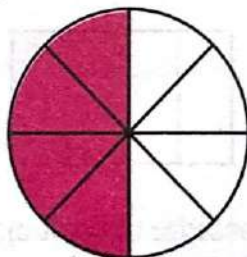
$$\frac{6}{8} = \frac{3}{4}$$

2. Tom rode his horse for $\frac{4}{6}$ mile. Liz rode her horse for an equal distance. What is an equivalent fraction that describes how far Liz rode? Use the models to show your work.



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

3. Mr. Peters made a pizza. There is $\frac{4}{8}$ of the pizza left over. Select the fractions that are equivalent to the part of the pizza that is left over. Mark all that apply.



☐ A $\frac{5}{8}$

☐ B $\frac{3}{4}$

☒ C $\frac{2}{4}$

☐ D $\frac{1}{2}$

GO ON

Practice Test

Name _____

4. Select the fraction that would be included in an equivalence chain for $\frac{1}{4}$.

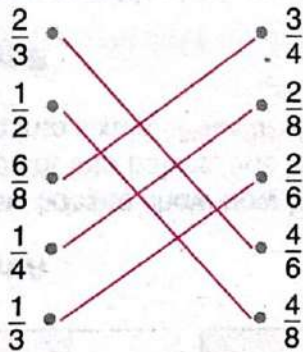
(A) $\frac{4}{4}$

(B) $\frac{2}{8}$

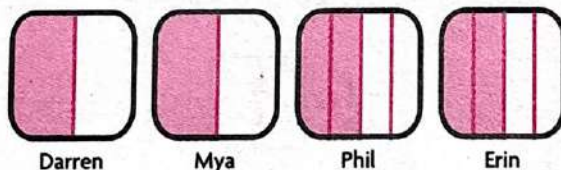
(C) $\frac{1}{6}$

(D) $\frac{6}{2}$

5. Draw a line to match the fraction on the left to an equivalent fraction or number on the right.



6. Darren, Mya, Phil, and Erin are having breakfast. Darren and Mya each eat $\frac{1}{2}$ of their omelets. Phil and Erin each eat $\frac{2}{4}$ of their omelets. Use the models to show how much of his or her omelet each person ate.



What fraction is equivalent to $\frac{1}{2}$?

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



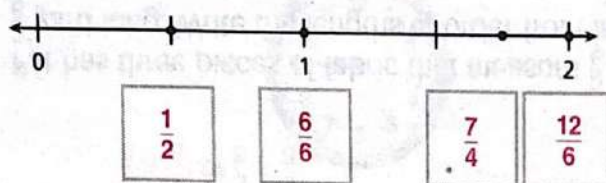
Name _____

Practice Test

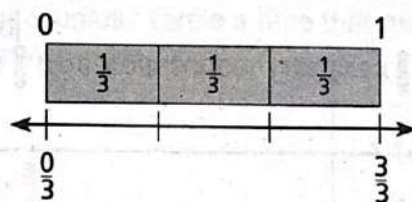
Learning Objective

Represent whole numbers as fractions.

1. Use the fractions to label each point on the number line.



2. Tara ran 3 laps around her neighborhood for a total of 1 mile yesterday. Today she wants to run $\frac{2}{3}$ of a mile. How many laps will she need to run around her neighborhood?



2 laps

3. Each shape is 1 whole. Which numbers name the parts that are shaded? Mark all that apply.

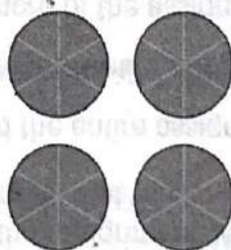
☒ A 4

☐ B 6

☐ C $\frac{4}{4}$

☒ D $\frac{4}{1}$

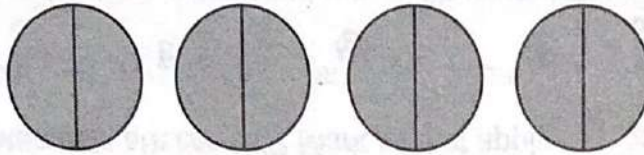
☐ E $\frac{4}{6}$



GO ON

Name _____

4. Each shape is 1 whole.



Select the numbers that name the shaded parts.
Mark all that apply.

☐ A 8

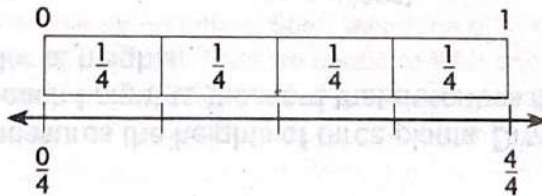
☒ B 4

☒ C $\frac{8}{2}$

☐ D $\frac{8}{4}$

☐ E $\frac{2}{8}$

5. Lucy rode her bike around the block 4 times for a total of 1 mile yesterday. Today she wants to ride her bike $\frac{3}{4}$ of a mile. How many times will she need to ride her bike around the block?



3 times

6. Henry and Reiko both use 1 yard of ribbon to make bows. Write two different fractions to show that Henry and Reiko use the same amount of ribbon.

Sample answers given.

Henry uses $\frac{5}{5}$ yard.

Reiko uses $\frac{2}{2}$ yard.



Name _____

Practice Test

Learning Objective

Compare fractions with the same numerator or same denominator by reasoning about their size based on the same whole using $<$, $>$, or $=$.

1. Dan and Miguel are working on the same homework assignment. Dan has finished $\frac{1}{4}$ of the assignment. Miguel has finished $\frac{3}{4}$ of the assignment. Which statement is correct? Mark all that apply.

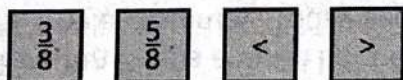
- ☐ A Miguel has completed the entire assignment.
☒ B Dan has not completed the entire assignment.
☒ C Miguel has finished more of the assignment than Dan.
☐ D Dan and Miguel have completed equal parts of the assignment.

2. Jenna painted $\frac{1}{8}$ of one side of a fence. Mark painted $\frac{1}{6}$ of the other side of the same fence. Use $>$, $=$, or $<$ to compare the parts that they painted.

$$\frac{1}{8} < \frac{1}{6} \text{ or } \frac{1}{6} > \frac{1}{8}$$

3. Chun lives $\frac{3}{8}$ mile from school. Gail lives $\frac{5}{8}$ mile from school.

Use the fractions and symbols to show which distance is longer.



$$\frac{5}{8} > \frac{3}{8} \text{ or } \frac{3}{8} < \frac{5}{8}$$

4. Pat has three pieces of fabric that measure $\frac{3}{6}$, $\frac{5}{6}$, and $\frac{2}{6}$ yard long. Write the lengths in order from least to greatest.

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

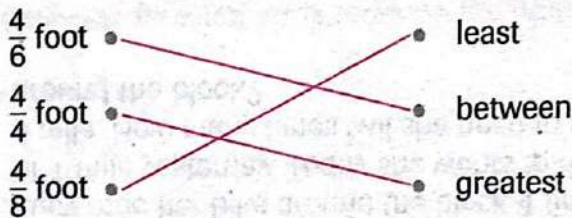
GO ON

Name _____

5. Bill used $\frac{1}{3}$ cup of raisins and $\frac{2}{3}$ cup of banana chips to make a snack. Compare the fractions. Choose the symbol that makes the statement true.

$\frac{1}{3}$	$<$	$\frac{2}{3}$
	$=$	
	$>$	

6. Cora measures the heights of three plants. Draw a line to match each height to the word that describes its place in the order of heights.



7. Mavis mixed $\frac{3}{4}$ quart of apple juice with $\frac{3}{6}$ quart of cranberry juice. Compare the fractions. Choose the symbol that makes the statement true.

$\frac{3}{4}$	$<$	$\frac{3}{6}$
	$=$	
	$>$	

8. Todd and Lisa are comparing fraction strips. Which statements are correct? Mark all that apply.

☒ A $\frac{1}{4} < \frac{4}{4}$

☐ B $\frac{5}{6} < \frac{4}{6}$

☒ C $\frac{2}{3} > \frac{1}{3}$

☒ D $\frac{5}{8} > \frac{4}{8}$



Name _____

Practice Test

Learning Objective

Solve word problems involving addition and subtraction of time intervals in minutes.

1. Tran checked the time on his watch after he finished his daily run.



Select the time that Tran finished running. Mark all that apply.

- ☒ A 14 minutes before nine ☐ C quarter to nine
☒ B eight forty-six ☐ D nine forty-six

2. Rita's class begins social studies at ten minutes before one in the afternoon. At what time does Rita's class begin social studies? Circle a time that makes the sentence true.

Rita's class begins social studies at

1:10 A.M.

1:10 P.M.

12:50 A.M.

12:50 P.M.

3. Yul and Sarah's art class started at 11:25 A.M. The class lasted 30 minutes. Yul left when the class was done. Sarah stayed an extra 5 minutes to talk with the teacher and then left.

Write the time that each student left. Explain how you found each time.

Yul: 11:55 A.M.; Sarah: noon or 12:00. I added the times.

$11:25 + 0:30 = 11:55$; $11:25 + 0:30 + 0:05 = 12:00$

GO ON 

Name _____

4. Anthony's family went out to dinner. They left at 5:05 P.M. They returned home 47 minutes later.

What time did Anthony's family get home?

5:52 P.M.

5. Jason and Alyssa went to the park. Jason left the park at 1:35 P.M. Alyssa left the park 45 minutes later. What time did Alyssa leave the park?

2:20 P.M.

6. A chicken dish needs to bake in the oven for 35 minutes. The dish needs to cool for at least 8 minutes before serving. Scott puts the chicken dish in the oven at 5:14 P.M.

Can Scott serve the dish at 5:51 P.M.? Explain how you know.

No; Possible explanation: Scott takes the dish out of the oven at 5:49 P.M. Then he needs to let it cool for 8 minutes or until 5:57 P.M. before he can serve it.



Name _____

Practice Test

Learning Objective

Estimate mass and volume, and solve one-step word problems involving mass and volume using the four operations.

1. A large bottle of water holds about 2 liters.

Which other container will hold all of the water?

- ☐ A water glass
- ☐ B ice cube tray
- ☒ C large soup pot
- ☐ D cereal bowl

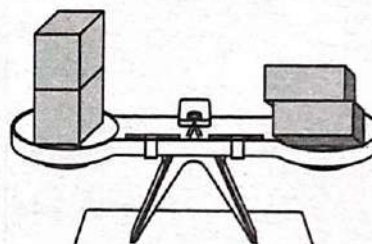
2. Cara uses a balance scale to compare mass.

Circle a symbol that makes the comparison true.

The mass of the blocks

<
>
<input checked="" type="radio"/> =

the mass of the erasers.



3. Select the items that would be best measured in grams.
Mark all that apply.

- ☐ A watermelon
- ☒ B lettuce leaf
- ☒ C grape
- ☒ D onion

GO ON 

Name _____

4. Lucy fills a bathroom sink with water. Is the amount of water *more than 1 liter*, *about 1 liter*, or *less than 1 liter*? Explain how you know.

More than 1 liter; Possible explanation: A liter is only about

the amount in a medium bottle of water. That amount would

not fill a sink, so the full sink has more than 1 liter.

5. Amy has 30 grams of flour. She puts 5 grams of flour in each pot of potato soup that she makes. How many pots of potato soup can Amy make?

☐ A 3 pots

☐ B 5 pots

☒ C 6 pots

☐ D 15 pots

6. A deli makes its own salad dressing. Each bottle has 3 grams of spices. How many grams of spices are needed to make 8 bottles?

24 grams of spices

7. Select the objects with a mass greater than 1 kilogram. Mark all that apply.

☒ A bicycle

☐ C eraser

☐ B pen

☒ D chair



Name _____

Practice Test

Learning Objective

Create bar graphs, picture graphs, and frequency tables to represent a data set with several categories, and solve one- and two-step problems using the graphs and tables.

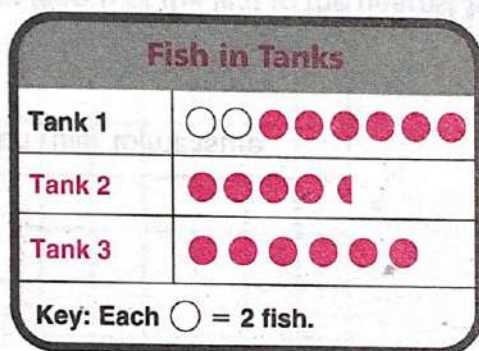
Use the frequency table for 1–2.

- The Pet Shop keeps track of the number of fish it has for sale. The frequency table shows how many fish are in three tanks.

Fish in Tanks	
Tank	Number of Fish
Tank 1	16
Tank 2	9
Tank 3	12

Part A

Use the data in the table to complete the picture graph.



Part B

How many pictures did you draw for Tank 2? Explain.

$4\frac{1}{2}$; Possible explanation: Because each circle represents 2 fish, I drew 4 circles to represent 8 fish and 1 half circle to represent 1 fish.

- Each tank can hold up to 20 fish. How many more fish can the Pet Shop put in the 3 tanks?

- ☐ A 60 fish ☐ C 20 fish
☒ B 23 fish ☐ D 33 fish

GO ON

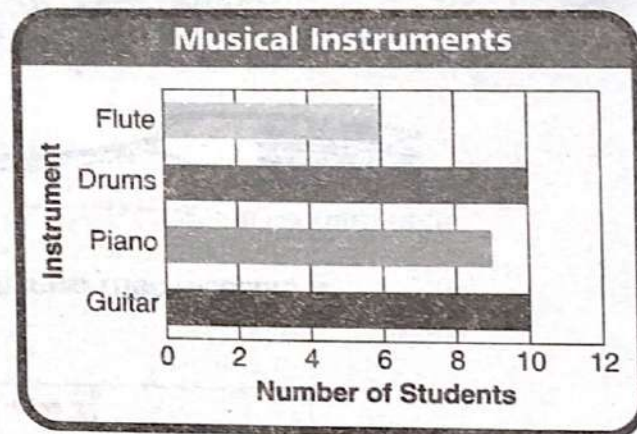
Name _____

Use the bar graph for 3–6.

3. Three more students play piano than play which other instrument?

flute

4. The same number of students play which two instruments?

guitar and drums

5. Which statements are true? Mark all that apply.
- ☐ A Ten more students play guitar than play flute.
 - ☒ B Nine students play piano.
 - ☐ C Six fewer students play flute and piano combined than play drums and guitar combined.
 - ☒ D Nine more students play piano and guitar combined than play drums.
6. There are more students who play the trumpet than play the flute, but fewer students than play the guitar. Explain how you would change the bar graph to show students who play the trumpet.

Possible explanation: I would add a fifth bar above flute. The bar will be longer than the bar for flute, which ends at 6, but shorter than the bar for guitar, which ends at 10.



Name _____

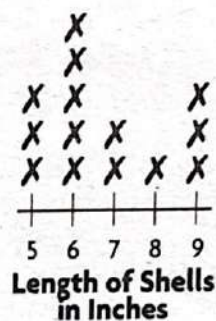
Practice Test

Learning Objective

Measure lengths with rulers to the nearest quarter of an inch, and represent measurement data using a line plot.

Use the line plot for 1–2.

Robin collected shells during her vacation. She measured the length of each shell to the nearest inch and recorded the data in a line plot.



1. How many shells were 6 inches long or longer?

11 shells

2. How many more shells did Robin collect that were 5 inches long than were 8 inches long?

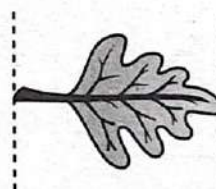
2 shells

3. Use an inch ruler to measure.

Part A

What is the length of the leaf to the nearest fourth-inch?

$1\frac{1}{4}$ inches

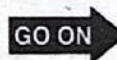


Part B

Explain what happens if you line up the left side of the object with the 1 on the ruler.

Possible explanation: You will get the wrong answer. The

leaf will measure 1 inch longer than it really is.

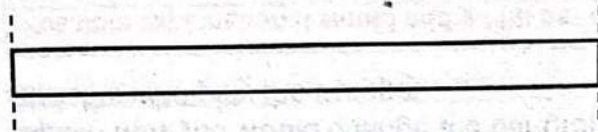


Name _____

4. Ashley measures the shells she collects. She records the measurements in a chart.

Part A

Ashley found a razor clam shell as long as this strip. Use an inch ruler to measure. Record the measurement in the chart.

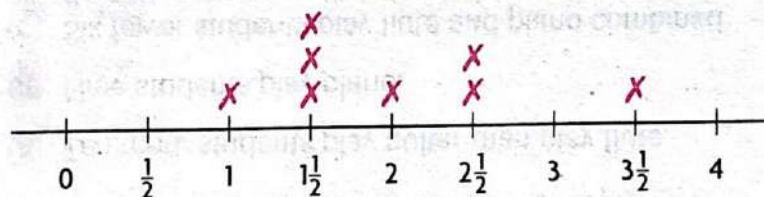


$3\frac{1}{2}$ inches

Number of Shells	Length in Inches
1	1
2	$2\frac{1}{2}$
3	$1\frac{1}{2}$
1	2
1	$3\frac{1}{2}$

Part B

Complete the line plot to show the data in the chart. How many shells are longer than 2 inches? Tell how you know.



Length of Shells Measured to the Nearest Half Inch

Possible answer: 3 shells are longer than 2 inches. I

counted the number of Xs above $2\frac{1}{2}$ and $3\frac{1}{2}$.

5. Estimate the length of the fork in inches. Then measure it to the nearest $\frac{1}{4}$ inch.



Estimate: 5 in.

Actual: $5\frac{1}{4}$ in.



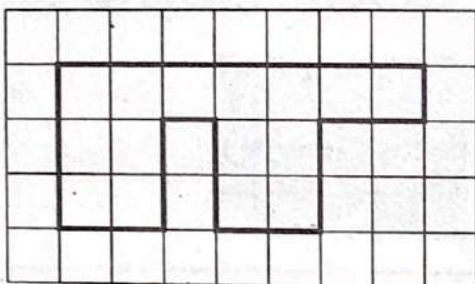
Name _____

Practice Test

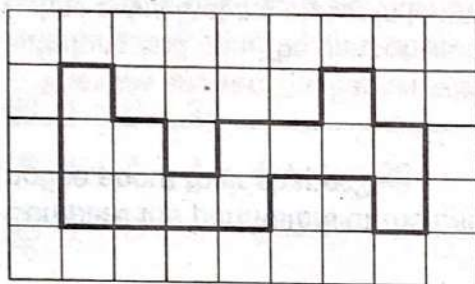
Learning Objective

Find the area of a rectangle with whole-number side lengths using modeling with unit squares.

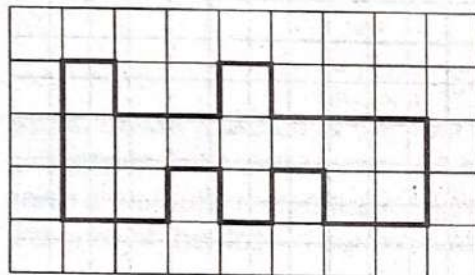
1. Draw a line from the figure to the area of the figure.



13 square units



14 square units



15 square units

2. What is the perimeter and area of this figure?
Explain how you found the answer.

Perimeter 24 units

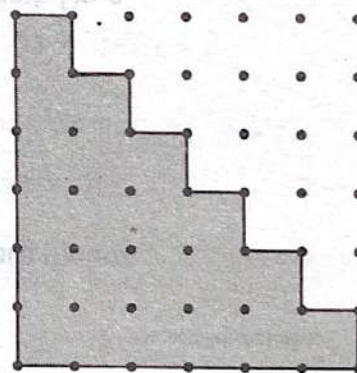
Area 21 square units

Possible explanation: For perimeter, I counted the

unit edges around the figure: $6 + 6 + 12 = 24$. For

area, I counted the unit squares inside the figure:

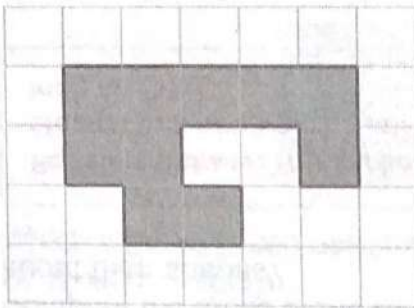
$$1 + 2 + 3 + 4 + 5 + 6 = 21.$$



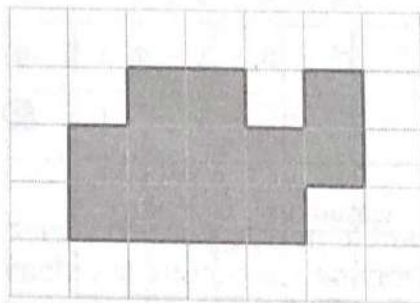
GO ON

Name _____

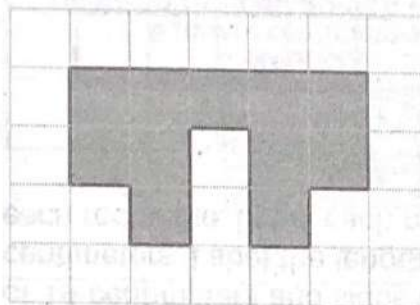
3. Draw a line from the figure to the area of the figure.



10 square units



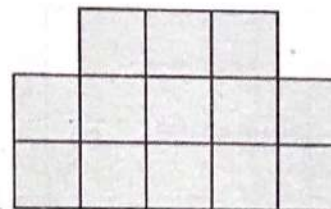
11 square units



12 square units

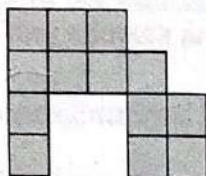
4. How many squares need to be added to this figure so that it has the same area as a square with a side length of 5 units?

12 squares



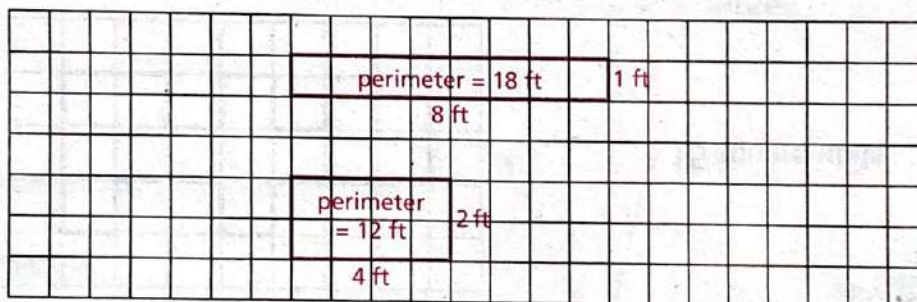
Learning Objective

1. What is the area of the figure shown? Each unit square is 1 square meter.



13 square meters

- 2.** Steve makes a banner with an area of 8 square feet. On a grid, draw all possible rectangles with an area of 8 square feet and sides whose lengths are whole feet. Label the lengths of two adjacent sides of each rectangle. Label each rectangle with its perimeter.



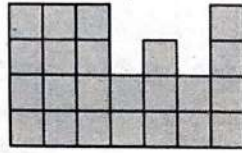
Compare the perimeters of the banners. What do you notice about their shapes?

Possible answer: The banner with the greater perimeter is long and thin. The banner with the lesser perimeter has sides that are closer in length.

GO ON

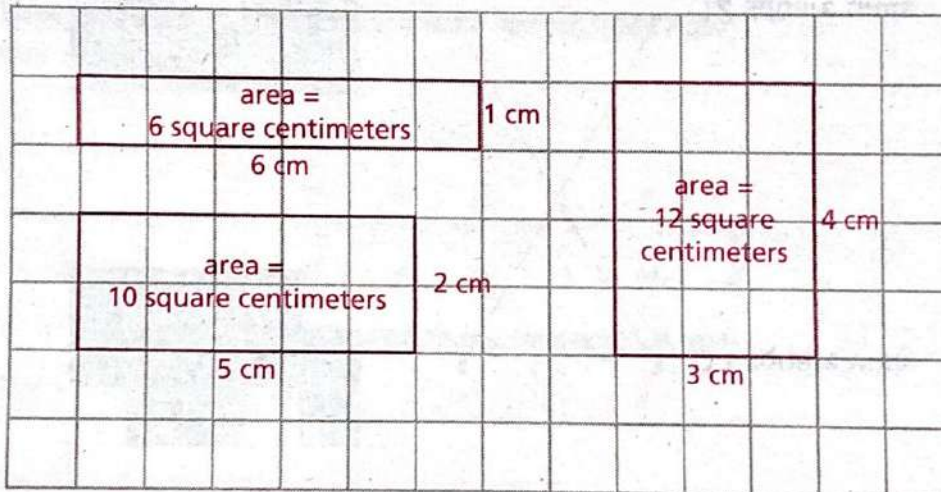
Name _____

3. What is the area of the figure shown? Each unit square is 1 square foot.



23 square feet

4. Dory designs a sticker with a perimeter of 14 centimeters. On the grid, draw all possible rectangles with a perimeter of 14 centimeters and sides whose lengths are whole centimeters. Label the lengths of two adjacent sides of each rectangle. Label each rectangle with its area.



Compare the areas of the rectangles. What do you notice about their shapes?

Possible answer: The sticker with the greatest area is closest to a square. The sticker with the least area is long and thin.



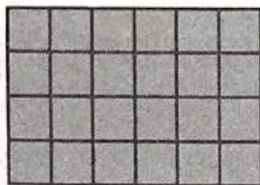
Name _____

Practice Test

Learning Objective

Find the area of a rectangle with whole-number side lengths using multiplication and modeling with unit squares.

1. Brady is placing square tiles on the floor of the kitchen. Each unit square is 1 square foot.



Which equations can Brady use to find the area of the kitchen floor? Mark all that apply.

☒ A $4 \times 6 = 24$

☒ D $6 + 6 + 6 + 6 = 24$

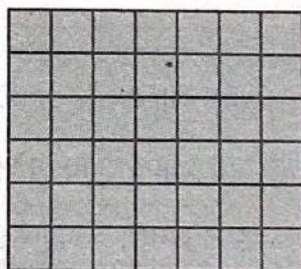
☐ B $4 + 4 + 4 + 4 + 4 = 20$

☐ E $4 \times 5 = 20$

☐ C $4 + 6 + 4 + 6 = 20$

☒ F $6 \times 4 = 24$

2. Simon draws a sketch of the floor of his tree house on grid paper. Each unit square is 1 square foot. Write and solve a multiplication equation that can be used to find the area of the floor in square feet.



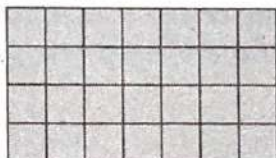
$6 \times 7 = 42$ or $7 \times 6 = 42$

42 square feet

GO ON

Name _____

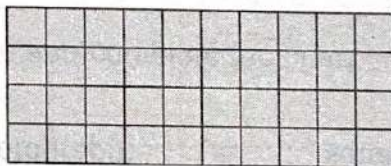
3. The drawing shows Seth's plan for a fort in his backyard. Each unit square is 1 square foot.



Which equations can Seth use to find the area of the fort? Mark all that apply.

- ☒ A $4 + 4 + 4 + 4 = 16$
☐ D $4 \times 4 = 16$
☐ B $7 + 4 + 7 + 4 = 22$
☐ E $7 \times 7 = 49$
☒ C $7 + 7 + 7 + 7 = 28$
☒ F $4 \times 7 = 28$

4. Keisha draws a sketch of her living room on grid paper. Each unit square is 1 square meter. Write and solve a multiplication equation that can be used to find the area of the living room in square meters.

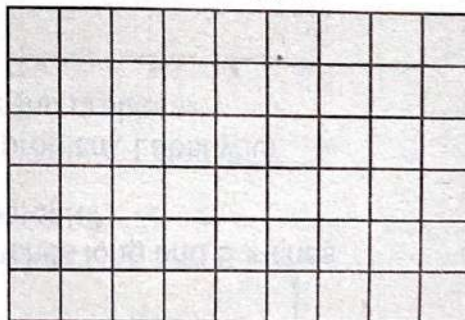


$4 \times 10 = 40$ or $10 \times 4 = 40$

40 square meters

5. Colleen drew this rectangle. Select the equation that can be used to find the area of the rectangle. Mark all that apply.

- ☒ A $9 \times 6 = n$
☐ B $9 + 9 + 9 + 9 + 9 = n$
☐ C $9 + 6 = n$
☒ D $6 \times 9 = n$
☐ E $6 + 6 + 6 + 6 + 6 = n$



Name _____

Practice Test

Learning Objective

Solve word problems by multiplying rectangles with whole-number side lengths to find their area.

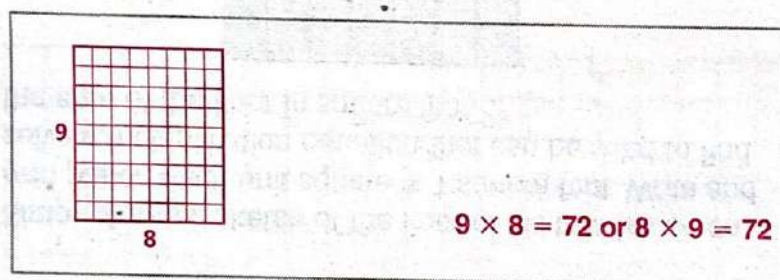
1. Elizabeth has a rectangular garden in her yard. The garden has a length of 8 feet and a width of 6 feet. What is the area of the garden?

_____ **48** _____ square feet

2. Raul makes a sign for the school fair. It has a length of 9 inches and a width of 8 inches. What is the area of the sign?

Draw a rectangle to help solve the problem. Label your drawing.

Write an equation to solve the problem.



Area of the sign: _____ **72** _____ square inches

3. Lydia is knitting a blanket. The blanket will be 5 feet long and 4 feet wide. What will the area of the blanket be?

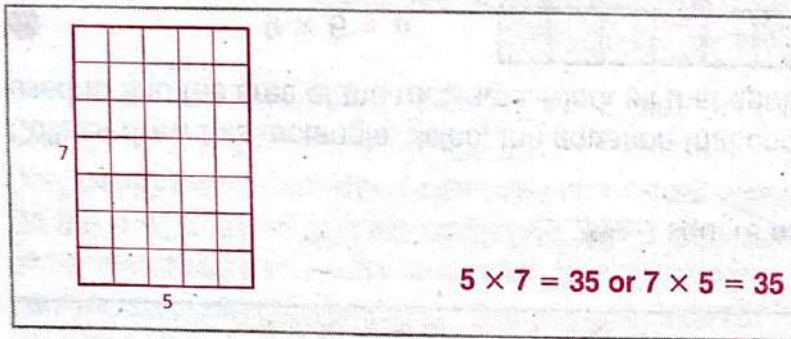
- (A) 24 square feet
(B) 20 square feet
(C) 15 square feet
(D) 9 square feet

GO ON 

Name _____

4. Etta prints a photograph that is 7 inches long and 5 inches wide. What is the area of the photograph?

Draw a rectangle to help solve the problem. Label your drawing. Write an equation to solve the problem.



Area of the photograph: 35 square inches

5. Find the pattern and complete the chart.

Total Area (in square feet)	50	60	70	80	90
Length (in feet)	10	10	10	10	10
Width (in feet)	5	6	7	8	9

How can you use the chart to find the length and width of a figure with an area of 100 square feet?

Possible answer: Extend the chart to 100 square feet and continue

the pattern: length 10 feet, width 10 feet. The figure is a square.



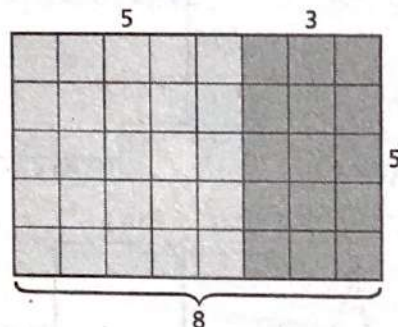
Name _____

Practice Test

Learning Objective

Use rectangular area models and tiling to represent the Distributive Property.

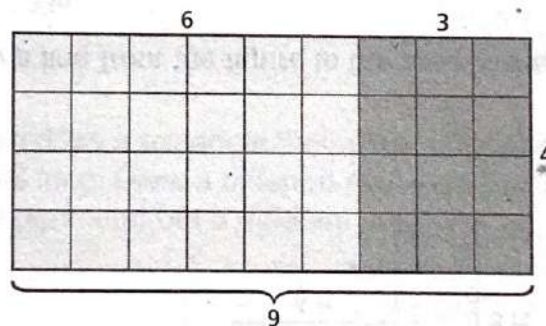
1. Sydney wants to find the area of the large rectangle by adding the areas of the two small rectangles.



Which expression could Sydney use to find the area of the large rectangle?

- ☐ (A) $(8 \times 5) + (5 \times 5)$
- ☐ (B) $25 + 20$
- ☒ (C) $(5 \times 5) + (3 \times 5)$

2. Kylie wants to find the area of the large rectangle by adding the areas of the two small rectangles.



Select the expressions Kylie could use to find the area of the large rectangle. Mark all that apply.

- ☒ (A) $24 + 12$
- ☒ (B) $(4 \times 6) + (4 \times 3)$
- ☒ (C) $(6 \times 4) + (9 \times 4)$

GO ON 