

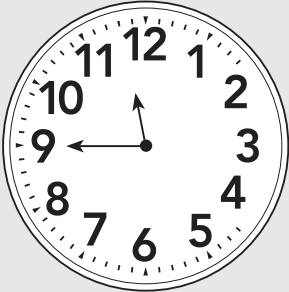
Third Grade  
**Answer Key**  
**Unit 6: Measurement &  
Elapsed Time**

See PDF bookmarks  
for navigation

# Problem of the Day

## Lesson 1

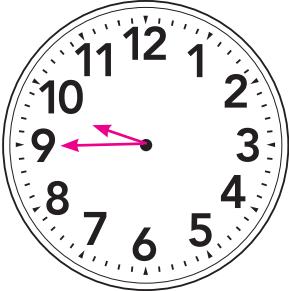
Write the time shown on the clock below.



Answer: 11:45

## Lesson 2

Draw a quarter to 10 on the clock below.



## Lesson 3

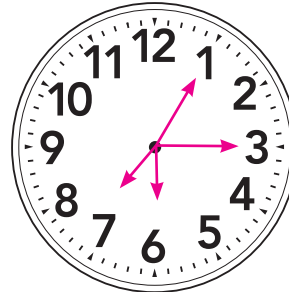
What is one hour later than the time shown below?



Answer: 8:35

## Lesson 4

Jake left to go to the store at 6:15 and returned home at 7:05. How long was Jake at the store? Use the clock below to model.



Answer: 50 minutes

## Lesson 5

Trent came home from school at 4:50 and worked on homework for 45 minutes. What time did Trent finish his homework? Draw a number line to show your work and solve.



Answer: 5:35

# Problem of the Day

## Lesson 6

Stacey went on a run at 9:15 and returned home at 10:25. How long was Stacey on a run? Draw a T-chart to show your work and solve.

Answer: 1:10

## Lesson 7

Jack left to go to the store at 10:40. If he spent 5 minutes driving there, 35 minutes shopping, and 5 minutes driving home, what time did Jack return home?

This should be  
11:25

Answer: 11:45

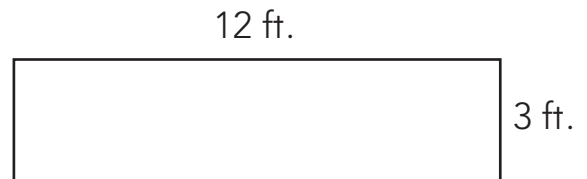
## Lesson 8

Mac's movie finished at 5:15 p.m. If the movie was 2 hours and 5 minutes, what time did the movie start?

Answer: 3:10 p.m.

## Lesson 9


Solve for the perimeter of the figure below.

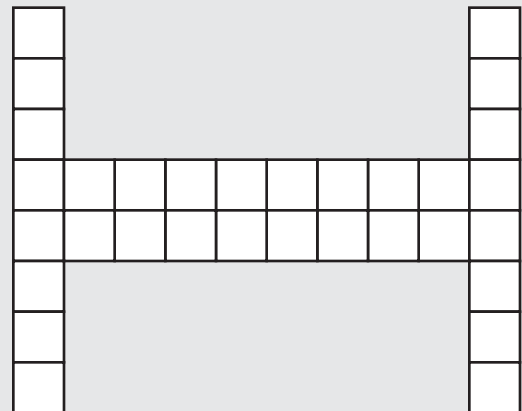


Answer: 30 ft.

## Lesson 10

Find the perimeter of the figure below.

 = 1 sq. ft.



Answer: 32 ft.

# Problem of the Day

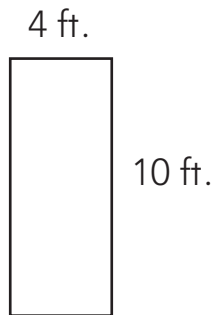
## Lesson 11

Drake has a square rug with sides that measure 9 feet. What is the perimeter of Drake's rug?

Answer: 36 ft.

## Lesson 12


Solve for the area of the figure below.

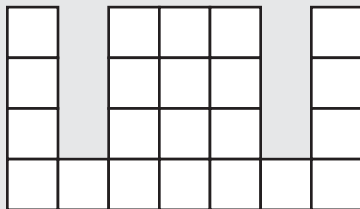


Answer: 40 sq. ft.

## Lesson 13

Solve for the area of the figure below.

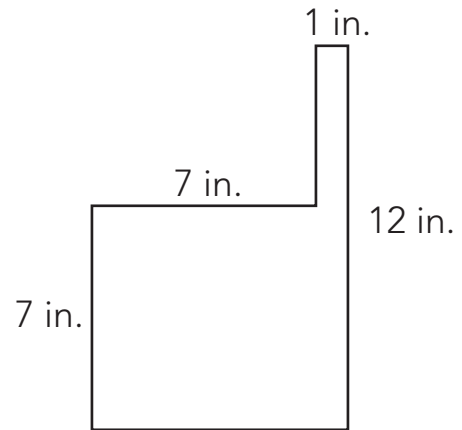
 = 1 sq. ft.



Answer: 22 sq. ft.

## Lesson 14

Find the area of the figure below.



Answer: 61 sq. ft.

## Lesson 15

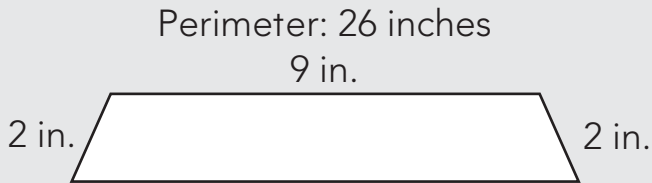
Caitlyn's fence has an area of 30 square feet. Jake's fence has a length of 2 feet and a width of 15 feet. Whose fence has a larger area?

Answer: Sample answer: They have the same amount of area.

# Problem of the Day

## Lesson 16

Find the length of the missing side of the figure below.



Answer: 13 in.

## Lesson 17

Which unit would you use to measure the weight of a mouse?

**A. ounce**

B. pound

C. ton

## Lesson 19

Measure the sides of the shape below, rounding to the nearest inch. Then determine the area and perimeter of the shape.



Perimeter: 6 in.

Area: 2 sq. in.

## Lesson 18

Which unit would you use to measure the capacity of a cup of hot cocoa?

**A. milliliter**

B. cup

C. gallon

D. quart

## Lesson 20

If Henry has 4 gallons of milk, how many cups of milk does he have?

A. 16 cups

B. 56 cups

**C. 64 cups**

D. 32 cups

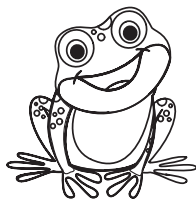
# Pre-Assessment

Read each problem below and solve.

1. Rick has a square backyard. If one side of the backyard is 12 feet, what is the perimeter of Rick's backyard?

Answer: 48 ft.

2. Which of the following would be the best unit of measure to determine how much the frog weighs?



**A. Pounds**

B. Inches

C. Feet

D. Tons

3. Missy left the house at 9:30 a.m. to go grocery shopping. If she returned home at 11:15 a.m., how long was Missy at the grocery store?

Answer: 1:45

4. Willis wants to cover his living room with carpet. How many feet of carpet will Willis need? (Hint: Find the area.)

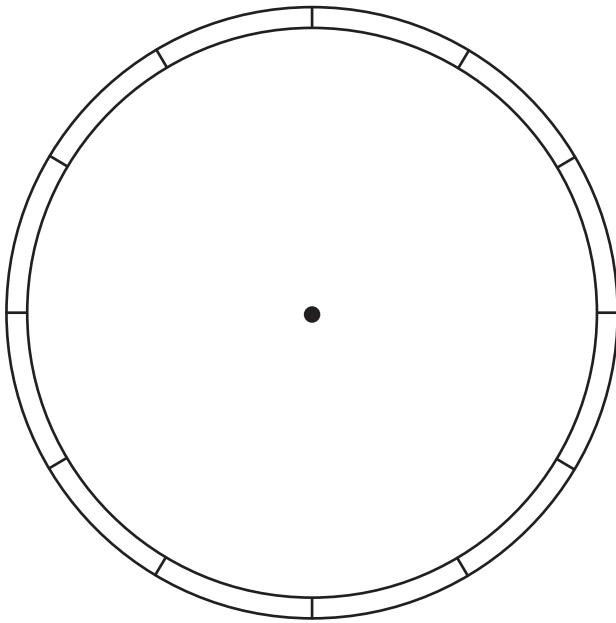


Answer: 88 sq. ft.

5. Elizabeth needs to be at school by 8:45 a.m. If it takes her 20 minutes to drive from her house to school, what time should she leave her house?

Answer: 8:25 a.m.

# Telling Time Refresher



The big hand represents the minutes of the time.

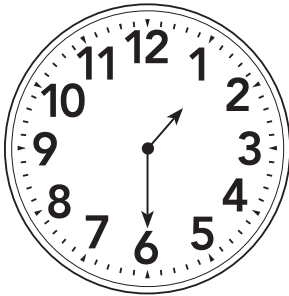
The little hand represents the hours of the time.

\_\_\_\_\_ hour \_\_\_\_\_ minutes

\_\_\_\_\_:\_\_\_\_\_ = time

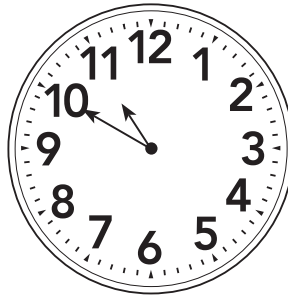
Conversions

\_\_\_\_\_ minutes = 1 hour  
\_\_\_\_\_ seconds = 1 minute



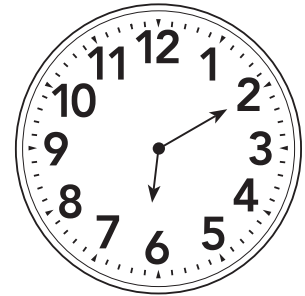
Digital Form

Word Form



Digital Form

Word Form

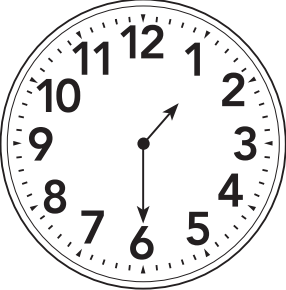
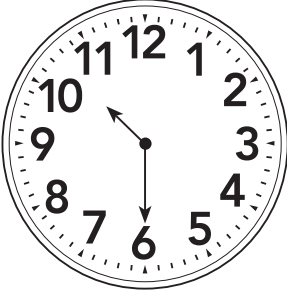


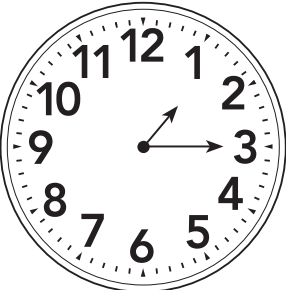
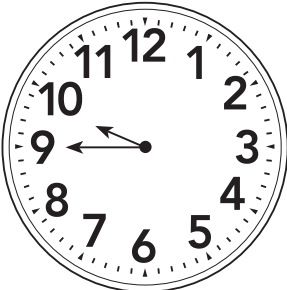
Digital Form

Word Form

Answers will vary.

# Telling Time

HALF HOUR	The minute hand represents when the <b>times</b> are halfway through the hour.	 <b>1:30</b>	 <b>10:30</b>
	Time phrases:		
	<b>half past</b>		
	<b>30 minutes after</b>		

QUARTER HOUR	The minute hand represents when the <b>times</b> are at the fifteen or forty-five minute marker.	 <b>1:15</b>	 <b>9:45</b>
	Time phrases:		
	<b>quarter til</b>		
	<b>quarter after</b>		

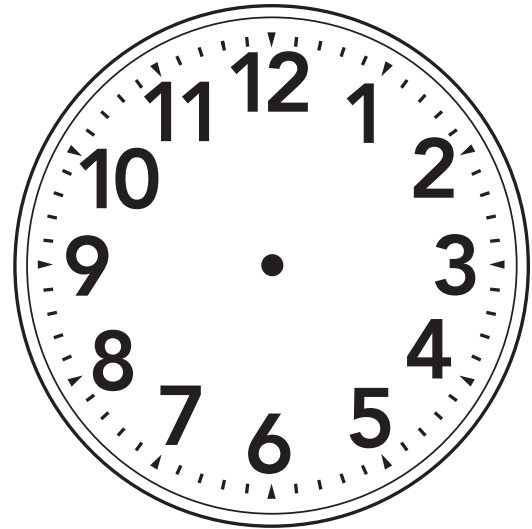
## WRITE THE TIMES

HALF PAST 2	QUARTER TO 5	HALF PAST 11	QUARTER AFTER 8
<b>2 : 30</b>	<b>4 : 45</b>	<b>11 : 30</b>	<b>8 : 15</b>

# Elapsed Time: Analog

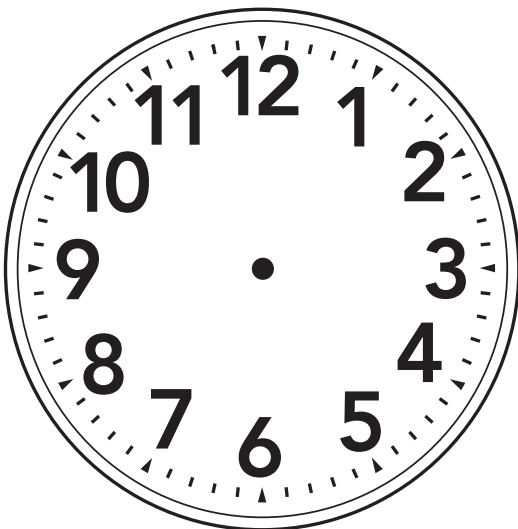
Damian's soccer game started at 10 a.m. The game lasted until 11:15. How long was Damian's soccer game?

1. Determine what information was provided in the problem:  
S: **10:00**    E: **11:15**    ET: **1:15**
2. Draw the start time on the clock.
3. Count ahead hours first. Use a blue colored pencil to skip count around the clock one hour.
4. Count ahead minutes. Use a red colored pencil to skip count the number of minutes remaining, count by 5 minute increments.
5. Add the hours and minutes together to determine the elapsed time.



1. Timmy went running at 8:25 a.m. He ran for 55 minutes. What time did Timmy return from his run?

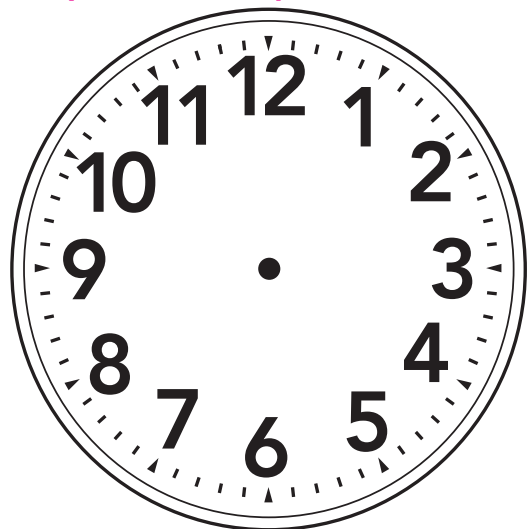
S: **8:25**    E: **9:20**    ET: **0:55**



Answer: **9:20 a.m.**

2. Susan came home from dinner at 9:00 p.m. If she spent 1 hour and 35 minutes at dinner, what time did Susan's dinner start?

S: **7:25 p.m.**    E: **9:00 p.m.**    ET: **1:35**



Answer: **7:25 p.m.**

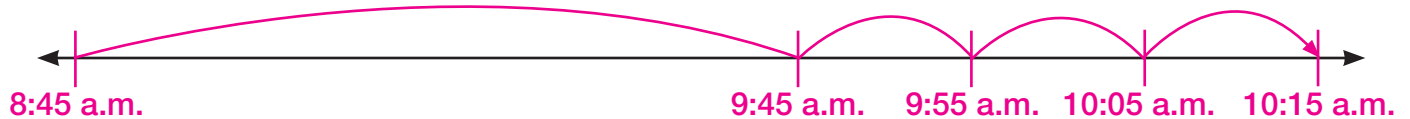
# Elapsed Time: Number Line

Fred left his house for errands at 8:45 a.m. and returned home at 10:15 a.m. How long was Fred running errands?

1. Determine what information was provided in the problem:

S: **8:45 a.m.** E: **10:15 a.m.** E.T.: **1:30**

2. Draw a number line.

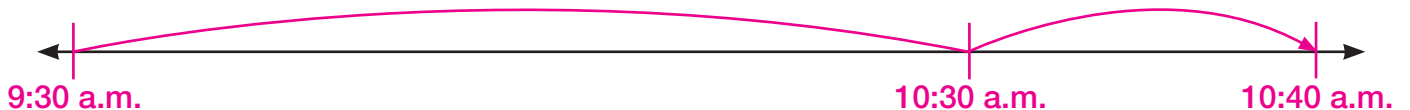


3. Write the start and end times on the number lines (start time at the beginning and end time towards the end).
4. Increase by increments of 1 hour, 10 minutes, 5 minutes, or 1 minute until you reach your end time. Hours are drawn with a mountain and minutes are drawn with a hill.
- \*Each time a mountain or hill is marked, write the time underneath it!
5. Add up the amount of elapsed time to find the answer.

Answer: **1:30**

1. Kendal started working out at 9:30 a.m. She worked out for 1 hour and 10 minutes. How long did Kendal work out for?

S: **9:30 a.m.** E: **10:40 a.m.** E.T.: **1:10**



Answer: **1:10**

2. Dave cooked a pizza for 55 minutes in the oven. If the pizza finished at 6:45, what time did Dave start cooking the pizza?

S: **5:55** E: **6:45** E.T.:



Answer: **0:55**

# Elapsed Time: T-Chart

Jack started his project at 5:45 p.m. He worked until 7:55 p.m. How much time did Jack spend on his project?

- Determine what information was provided in the problem:  
S: **5:45 p.m.** E: **7:55 p.m.** E.T.: **2:10**
- Draw a T-chart with the heads "Time" and "Hours/Minutes."
- If you were given a start time, write that under the time and write start.
- Increase by increments of 1 hour, 10 minutes, 5 minutes or 1 minute until you reach your end time.
- Add up the amount of elapsed time to find the answer.

Time	Hours/ Minutes
5:45 p.m.	0:00
6:45 p.m.	1:00
7:45 p.m.	1:00
7:55 p.m.	0:10

Answer: **2:10**

- Amanda went for a run at 6:15 p.m. for 45 minutes. What time did Amanda finish her run?

S: **6:15 p.m.** E: **7:00 p.m.** E.T.: **0:45**

TIME	HR./MINS.
6:15 p.m.	0:00
6:25 p.m.	0:10
6:35 p.m.	0:10
6:45 p.m.	0:10
6:55 p.m.	0:10
6:56 p.m.	0:01
6:57 p.m.	0:01
6:58 p.m.	0:01
6:59 p.m.	0:01
7:00 p.m.	0:01

Answer: **7:00 p.m.**

- Brandon finished his homework at 9:30 p.m. If he worked 2 hours and 15 minutes on his work, what time did he start his work?

S: **7:15 p.m.** E: **9:30 p.m.** E.T.: **2:15**

TIME	HR./MINS.
7:15 p.m.	0:00
8:15 p.m.	1:00
9:15 p.m.	1:00
9:25 p.m.	0:10
9:26 p.m.	0:01
9:27 p.m.	0:01
9:28 p.m.	0:01
9:29 p.m.	0:01
9:30 p.m.	0:01

Answer: **7:15 p.m.**

# Elapsed Time Quiz

Solve the problems below. Make sure to show your work and record your answers.

1. Tracy arrived at the amusement park at 10:30 a.m. She spent 10 minutes in line for the Scream, 15 minutes in line for Superman, and 20 minutes watching a dance show before going home. What time did Tracy go home?

Answer: 11:15 a.m.

2. Mark is going to meet his friends at the library at 2:00. It takes Mark 15 minutes to walk to the library and he needs 10 minutes to get his materials together. What time should Mark start to get his materials ready?

Answer: 1:35

3. Jane ran errands on Tuesday afternoon. It took her 30 minutes to go to the bookstore and 45 minutes to shop for groceries. If it took Jane 95 minutes to run all her errands, how many minutes did it take Jane to make her returns at the toy store?

Answer: 20 minutes

4. Morgan's pizza was delivered at 3:45 p.m. If it took the pizza 55 minutes to arrive, what time did Morgan order the pizza?

Answer: 11:15 a.m.

5. Mike's dad said he could play outside until 7:15 p.m. If Mike has half an hour left to play, what time is it now?

Answer: 6:45 p.m.

6. Tiffany arrived at the county fair at 9:45 a.m. She spent 15 minutes in line for the Ferris wheel, 20 minutes in line for cotton candy, and 18 minutes watching a clown show before going home. What time did Tiffany go home?

Answer: 10:38 a.m.

# Solve for Perimeter

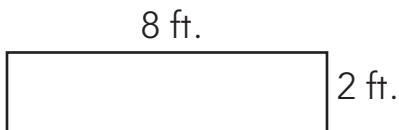
## DEFINITION

The measurement **for** the **rim** of an object.

## TYPES OF MODELS

### SHAPE MODEL


The model represents a figure. Add up the sides to find the perimeter.

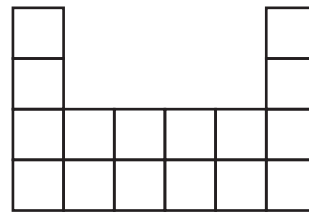


Perimeter: **20 ft.**

### GRID MODEL

Count the outside of all the square tiles. Use tick marks to help keep track. Always check the key to see what each square tile represents.

 = 1 sq. ft.




Perimeter: **24 ft.**

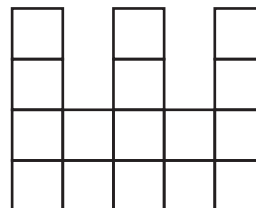
## PRACTICE THE SKILL

Find the perimeter of the figures below.



Perimeter: **20 ft.**

 = 1 sq. ft.

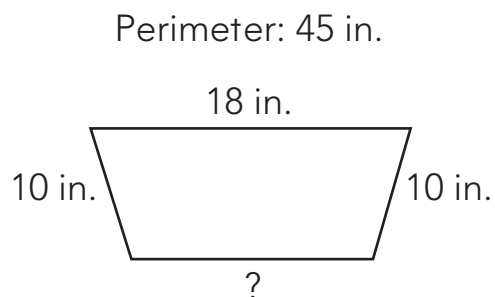


Perimeter: **26 ft.**

# Solve for Missing Sides

## MISSING A SIDE

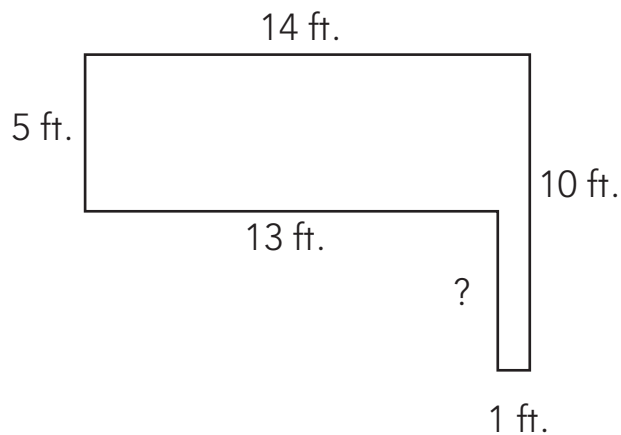
1. Examine the figure and determine what side is missing.
2. Take the given perimeter and either:
  - A. Add up all the sides and subtract from the given perimeter  
or
  - B. Subtract each known side length from the given perimeter.



Missing Side: 7 in.

## MISSING A SIDE AND PERIMETER

1. Examine the figure and determine what side is missing.
2. Determine where you can “cut” or split the figure to make rectangles or squares that allow you to determine missing sides.



Missing Side: 5 ft.

# Solve for Area

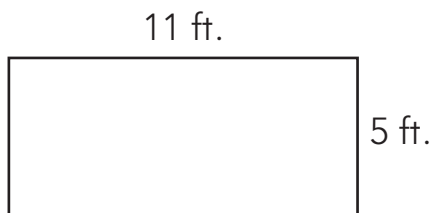
## DEFINITION

The measurement of **space** taken up **inside** an object (square units)

## TYPES OF MODELS

### SHAPE MODEL


The model represents an array. Use multiplication to solve.



Area: **55 sq. ft.**

### GRID MODEL

Count the square tiles to determine the area. Always check the key to see the measure of each tile!

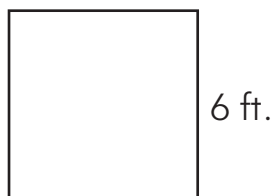
 = 1 sq. ft.




Area: **16 sq. ft.**

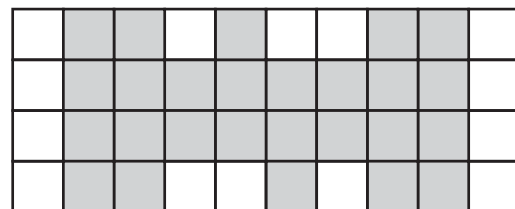
## PRACTICE THE SKILL

Find the area of the figures below.



Area: **36 sq. ft.**

 = 1 sq. ft.

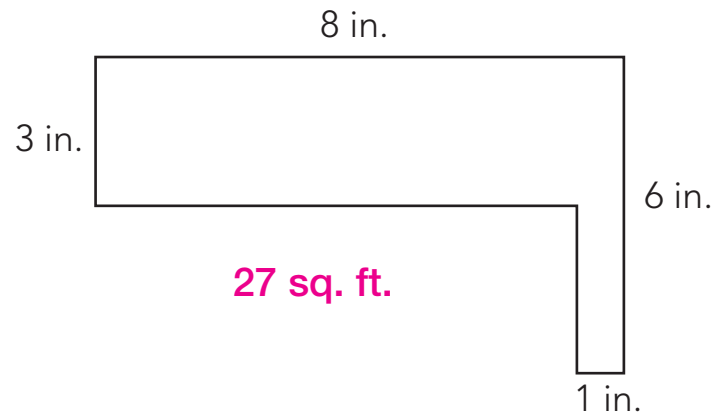


Area: **26 sq. ft.**

# Irregular Shapes

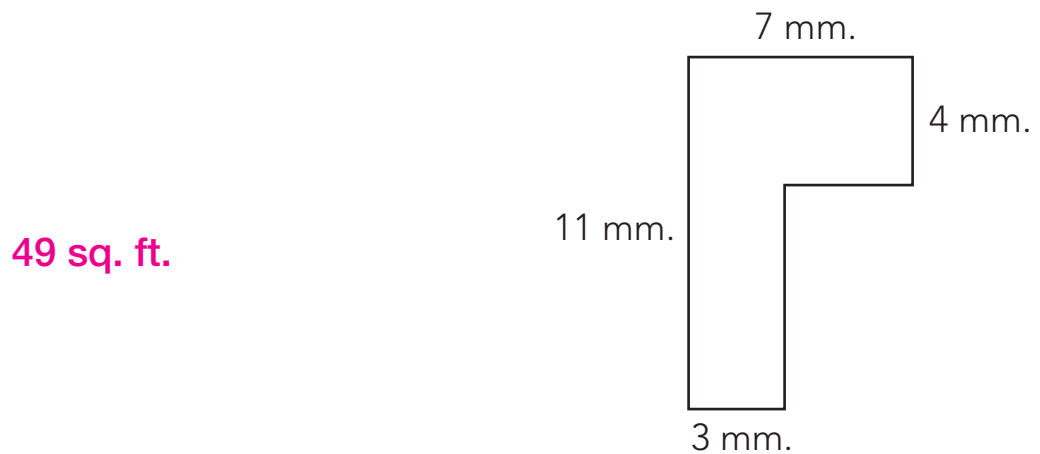
Find the area of the figure shown.

1. Examine the figure and determine where it can be split to make arrays.
2. Make the splits or cuts for the arrays and determine your multiplication sentences.
3. Multiply each array and then add all the arrays together to find the area.



## PRACTICE THE SKILL

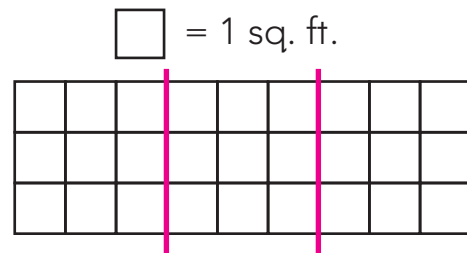
Find the area of the figure shown.



# Fractions and Area

Linda wants to paint her rectangular wall three different colors. She wants each color to equally cover the wall. Draw a picture of Linda's wall and determine how much area each color will be painted.

1. Determine how many parts the model needs to be split into.
2. Split the model into the number of equal parts.
3. Determine the area of each equal part.

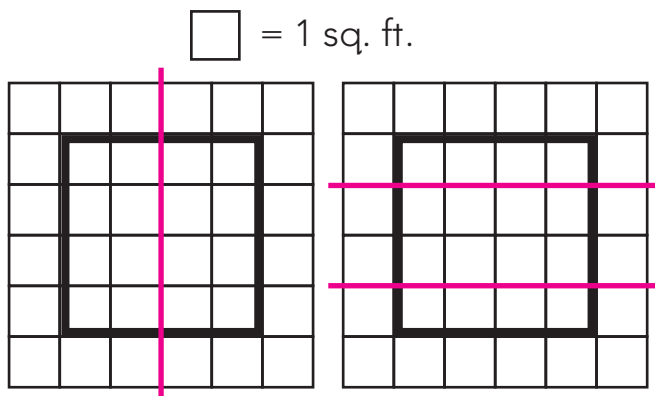


Answer: 9 sq. ft.

## PRACTICE THE SKILL

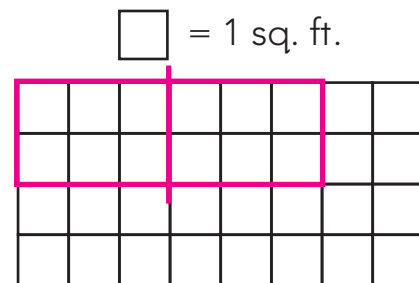
Solve the problems below.

1. Show two ways to separate the squares into four equal areas. What fraction shows the area of one part?



Answer:  $\frac{1}{4}$

2. Draw a rectangle 6 units wide and 2 units long. Split the rectangle into two equal pieces and find the area of one piece.



Answer: 6 sq. ft.

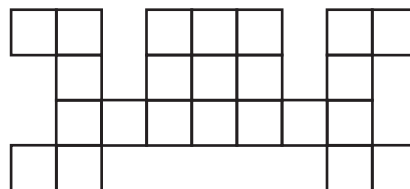
# Area and Perimeter Quiz

Read each problem below and solve.

1. Robbie planted a garden in the shape of a rectangle. If one side of the rectangle is 10 feet and the other side is 7 feet, what is the perimeter of Robbie's garden? (Hint: Draw a model.)

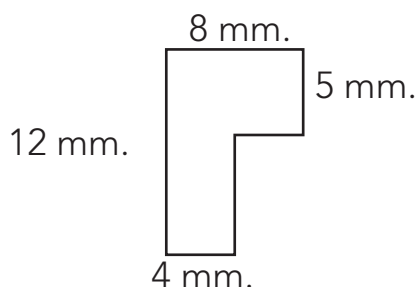
Answer: 34 ft.

2. What is the area of the figure below?



Answer: 23 sq. units

3. What is the area of the figure below?



Answer: 29 mm.

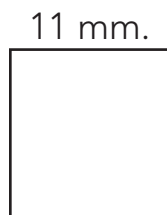
4. Find the perimeter of the square below.

A. 22 mm.

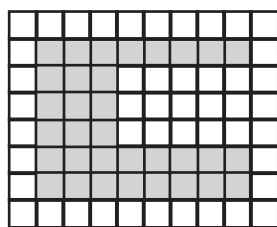
B. 111 mm.

C. 44 mm.

D. 121 mm.



5. Find the perimeter of the shaded figure below.

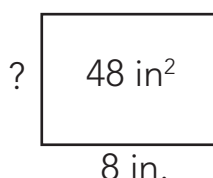


Answer: 38 units

6. Luke laid a rectangular rug down in his living room. If one side is 8 feet and the other side is 12 feet, what is the area of the rug? (Hint: draw a model.)

Answer: 96 sq. ft.

7. If the area of the figure below is 48 square inches and the length of one side is 8 inches, what is the width?



Answer: 6 in.

8. Find the missing side of the figure below.

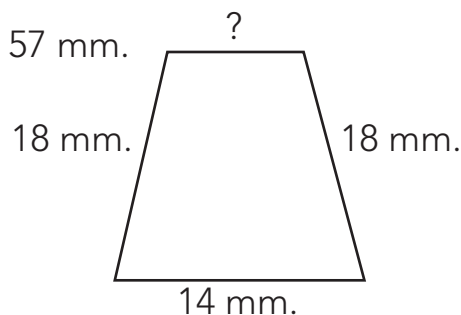
Perimeter = 57 mm.

A. 10 mm.

B. 7 mm.

C. 12 mm.

D. 6 mm.



# Customary Units of Weight

Answers will vary.

Weight = how heavy an object is

	DEFINE	PICTURE	EXAMPLES
OUNCE	about as heavy as <u>a strawberry</u> (oz.)		
POUND	about as heavy as <u>a pineapple</u> (lb.) 1 lb. = <u>16</u> oz.		
TON	about as heavy as <u>a car</u> (T.) 1 T. = <u>2,000</u> lb.		

# Metric Units of Weight

Answers will vary.

Mass = how much space

	DEFINE	PICTURE	EXAMPLES
MILLIGRAM	about as heavy as <u>a grain of salt</u> (mg.)		
GRAM	about as heavy as <u>a paperclip</u> (g.) 1 g. = <u>1,000</u> mg.		
KILOGRAM	about as heavy as <u>5 oranges</u> (kg.) 1 kg. = <u>1,000</u> g.		

# Customary Units of Capacity

Answers will vary.

capacity = the amount a container  
can hold.

	DEFINE	PICTURE	EXAMPLES
CUP	holds as much as a <u>1 cup</u> (c.)		
PINT	holds as much as a <u>small container</u> (pt.) 1 pt. = <u>2</u> c.		
QUART	holds as much as a <u>water bottle</u> (qt.) 1 qt. = <u>2</u> pt.		
GALLON	holds as much as a <u>large milk jug</u> (gal.) 1 gal. = <u>4</u> qt.		

# Metric Units of Capacity

Answers will vary.

capacity = the amount a container  
can hold.

	DEFINE	PICTURE	EXAMPLES
MILLILITER	holds as much as a <u>dropper</u> (mL.)		
LITER	holds as much as a <u>soda bottle</u> (L.) 1 L. = <u>1,000</u> mL.		

# Measuring Length

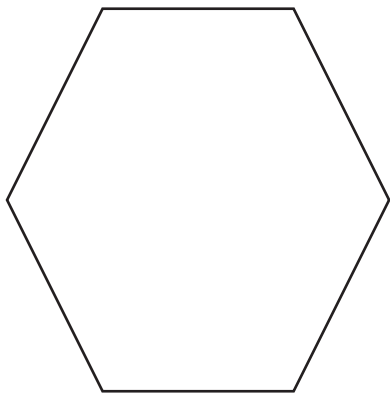
Answers will vary.

length = the amount of an  
object from hold to hold

CENTIMETERS	INCH	FOOT
measures <u>length of</u> objects Examples:	measures <u>length of</u> objects Examples:	12 in. = <u>1</u> ft. measures <u>length of</u> objects Examples:

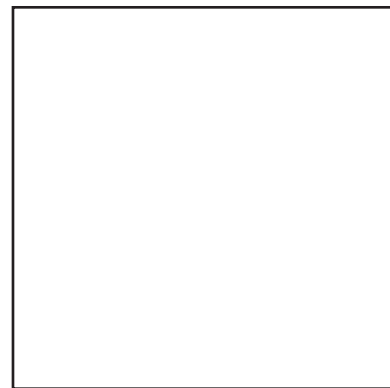
## PRACTICE & SOLVE

1. Desiree drew the figure below and wanted to measure the perimeter. Using millimeters, measure each side (round to the nearest inch) and find the perimeter.



Perimeter: 150 millimeters

2. Ethan drew the figure below and wanted to find the area. Using inches, measure each side (round to the nearest inch) and find the area.



Area: 64 sq. in.


# Assessment

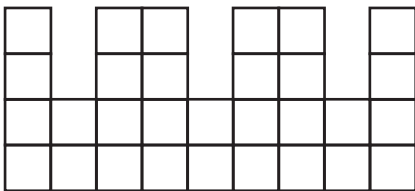
Read each problem below and solve.

1. Jim went for a run at 6:15 a.m. If he ran for one hour and 28 minutes, what time did he finish his run?

Answer: 7:43 a.m.

3. Find the area of this figure.

 = 1 sq. ft.



Answer: 30 sq. ft.

5. Becca wants to measure the capacity of her bathtub using cups. Do you think this is an appropriate unit of measure? Why or why not?

Sample answer: No, I think Becca needs to use a larger unit of measurement.

7. Aubrey took 15 minutes to do her chores, 5 minutes to pack her lunch, and 25 minutes to complete her homework. If she started her tasks at 4:30, what time did she finish?

Answer: 5:15

2. Daniel wants to find the weight of his backpack. Which item would allow Daniel to do that?

A. ruler  
**B. scale**  
 C. thermometer  
 D. wind vane

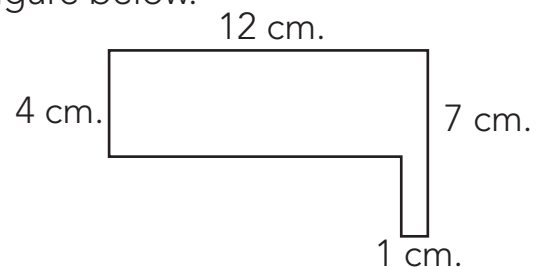
4. A rectangle has the side lengths of 9 inches and 12 inches. What is the perimeter of the rectangle?

Answer: 42 in.

6. James wants to practice measuring weight. James can use all of the following units except:

A. ton  
**B. meter**  
 C. ounce  
 D. pound

8. Find the perimeter of the figure below.

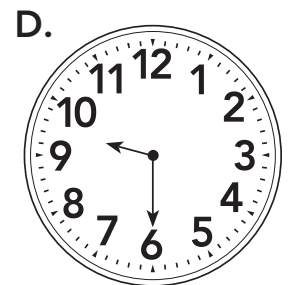
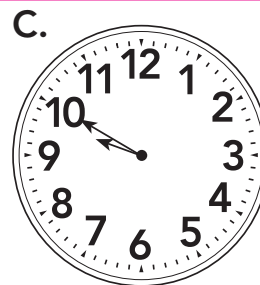
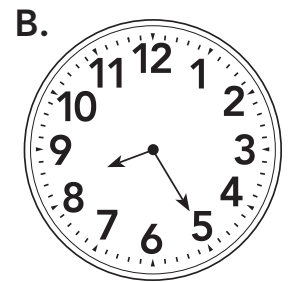
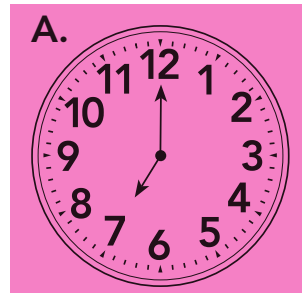


Answer: 38 cm.

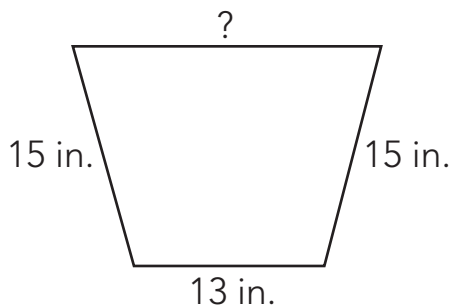
9. Diane wants to measure the amount of liquid in a kiddie pool. What form of measurement should she use?

A. pints  
B. quarts  
C. cups  
D. gallons

10. Mandy has dance class from quarter past seven to half past 9 every Wednesday. Which clock shows a time that Mandy is in dance class?



11. If the perimeter of the figure below is 61 inches, what is the missing length?



Answer: 17 in.

12. Brendon wants to estimate the weight of a dog. Which of the following is the best estimate?

A. 60 grams  
B. 60 pounds  
C. 60 tons  
D. 60 ounces

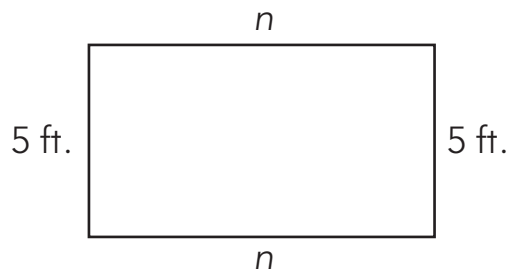
13. Tom left his house to run errands at 8:30 a.m. He spent 10 minutes driving to the store, 45 minutes shopping in the store, and 15 more minutes in traffic on his way home. What time did Tom return home?

Answer: 9:40 a.m.

14. Dexter drew a rectangle with a length of 16 inches and a width of 8 inches. What is the area of Dexter's rectangle?

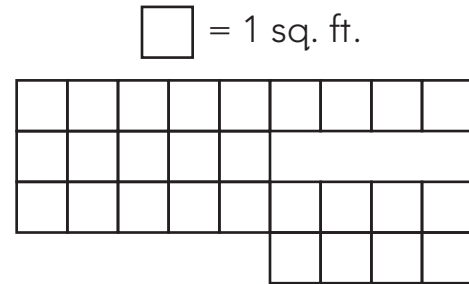
Answer: 128 sq. in.

15. Jeremiah built a toolbox with the perimeter of 28 feet. What is the length of side  $n$ ?



Answer: 9 ft.

16. Find the perimeter of the figure below.



Answer: 34 ft.

17. Martin left for school at 7:00 a.m. and arrived home at 3:15 p.m. Martin said he was gone from home for 7 hours and 15 minutes. Do you agree? Why or why not?

Justify:

Sample answer: No, Martin was  
actually gone for 8 hours and 15  
minutes

18. Daisy said that her square rug has a side length of 8 feet. She said the area and perimeter of the rug are the same, 32 feet. Do you agree? Why or why not?

Justify:

Sample answer: No, the area of  
the rug is 64 sq. ft.

19. Gina ordered a pizza at 12:55. If the pizza arrived at 1:35, how long did Gina have to wait for the pizza?

Answer: 0:40

20. Diane has 4 gallons of milk. How many pints are in Diane's four gallons?

- A. 4 pints  
 B. 8 pints  
 C. 32 pints  
 D. 16 pints



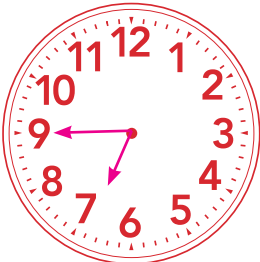
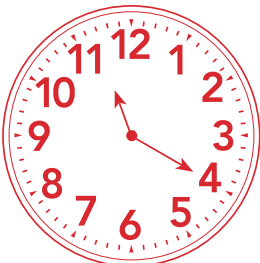
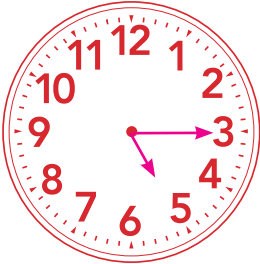
# TELLING TIME

Complete the table below by filling in the blanks.

ANALOG FORM	DIGITAL FORM	WORD FORM
	8:35	thirty-five after eight
	2:40	twenty to two
	5:00	five o'clock
	12:25	twenty-five after twelve
	3:15	quarter past three

# ANALYZE TIME

Complete the table below by filling in the blanks.

ANALOG FORM	DIGITAL FORM	WORD FORM
	1:40	twenty to two
	8:10	ten after eight
	6:45	a quarter to 7
	11:20	twenty after eleven
	5:15	a quarter after 5

Bruce came home from school at 3:15 and spent 1 hour and 30 minutes working on homework. What time did Bruce finish homework?



Answer: 4:45

Jake went for a run that lasted 1 hour and 5 minutes. If he arrived home at 5:10 p.m., what time did Jake's run start?



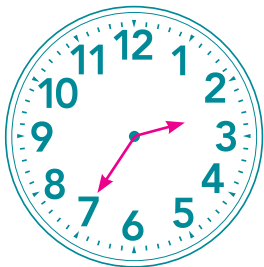
Answer: 4:05 p.m.

Eden met her friends at 4:10 for pizza and visited with them until 4:55. How long did Eden visit with her friends?



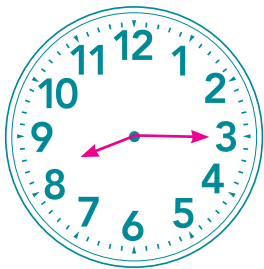
Answer: 24 minutes

Kate left her house at 2:00 to go shopping. If it took 5 minutes for her to get there, then she went shopping for 25 minutes, and finally took 5 more minutes to get home, what time did Kate return home?



Answer: 2:35

Tom watched a movie for one hour and 45 minutes. The movie ended at 10:00 p.m. What time did Tom start the movie?



Answer: 8:15 p.m.

Johnny's math class starts at 9:10 and lets out at 10:30. How long is Johnny's math class?



Answer: 1:20

Randal left to go fishing at 10 a.m. He returned home at 2:45 p.m. How long did Randal go fishing?

Answer: 4:45

Derek came home from running errands at 8:00 p.m. Derek's errands took him 2 hours and 35 minutes. What time did Derek start running errands?

Answer: 5:25 p.m.

Talia finished painting her nails at 3:55 p.m.  
and needed them to dry for 15 minutes. What  
time will Talia's nails be done drying?

Answer: 4:10 p.m.

Quinn met her family for dinner at 6:45 p.m. Quinn spent 1 hour and 55 minutes with her family at dinner. What time did Quinn's dinner finish?

Answer: 7:40 p.m.

Leo started to rake leaves at 8:15 a.m. He finished raking leaves at 10:05 a.m. How long did Leo spend raking leaves?

Answer: 1:50

Jamison went to meet a friend for dinner at 5:35 p.m. She stayed at dinner for 1 hour and 20 minutes. What time did Jamison return home?

Answer: 6:55 p.m.

Trevor left for school at 7:35 a.m. He returned home at 2:50 p.m. How long was Trevor at school?

Answer: 7:15

Tina went shopping for 3 hours and 25 minutes. If she started her shopping at 12:05 p.m., what time did she finish?

Answer: 3:30 p.m.

Rusty got out of a movie at 8:20 p.m. The movie was 2 hours and 10 minutes long. What time did the movie start?

Answer: 6:10 p.m.

Christian decided to take a nap at 1:30 p.m. He woke up from his nap at 4:05 p.m. How long did Christian take a nap?

Answer: 2:35

Blaire went to a doctor's appointment at 9:45 a.m. Her appointment lasted 15 minutes. What time did Blaire finish her doctor's appointment?

Answer: 10:00 a.m.

Stephanie has swimming lessons at 4:15 p.m.  
If it takes her mom 25 minutes to drive to  
the pool, what time do they need to leave  
their house?

3:50 p.m.

Jacob wants to go see a movie with his friends. The movie starts at 2:20 and is 2 hours and 5 minutes long. What time will Jacob get out of the movie?

4:25 p.m.

Jessica babysits every Wednesday night from 6:15 to 8:30. How long does Jessica babysit each Wednesday night?

2:15

Blaine wants to help his mom grill chicken for dinner. The directions say to grill the chicken for 35 minutes. If they start grilling the chicken at 5:50, what time should it be ready?

4:25 p.m.

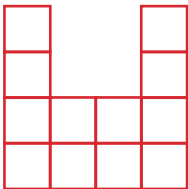
Jake wakes up at 6:00 a.m. every morning.  
If it takes him 5 minutes to get dressed,  
10 minutes to eat breakfast, and 5 minutes to  
pack his lunch, what time should Jake be out  
the door?

6:20 a.m.

Dawn needs to be at her hair appointment at 10 a.m. If it takes 35 minutes to drive to her appointment, what time does Dawn need to leave her house?

9:25 a.m.

 = 1 sq. ft.



Perimeter: 24 ft.

20 in.



Perimeter: 80 in.

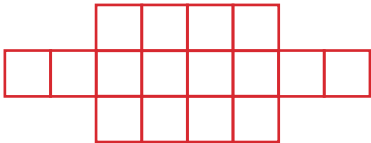
18 in.

3 in.



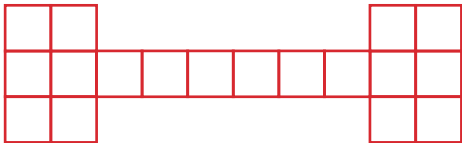
Perimeter: 42 in.

 = 1 sq. ft.



Perimeter: 22 ft.

 = 1 sq. ft.



Perimeter: 30 ft.

4 mm.



8 mm.

Perimeter: 24 mm.

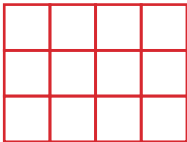
17 ft.



5 ft.

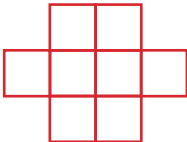
Perimeter: 44 ft.

 = 1 sq. ft.



Perimeter: 14 ft.

 = 1 sq. ft.



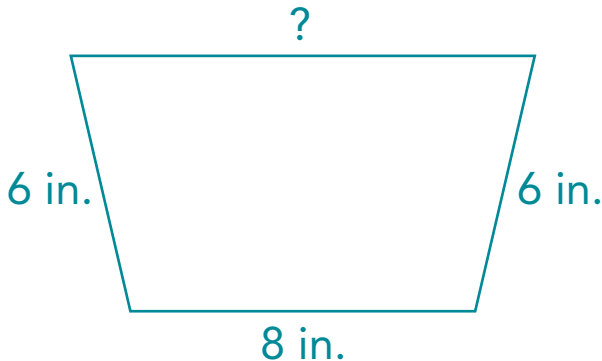
Perimeter: 14 ft.



1 in.

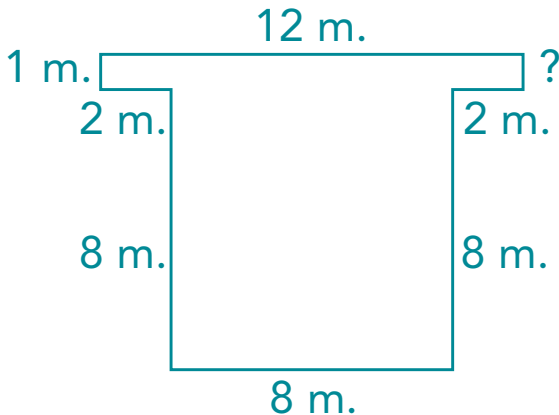
Perimeter: 4 in.

Perimeter: 32 Inches



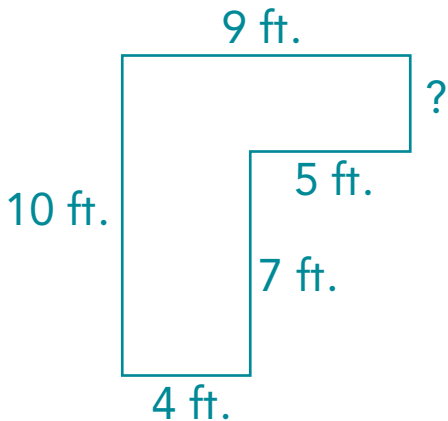
Missing Side: 12 in.

## Perimeter: Unknown



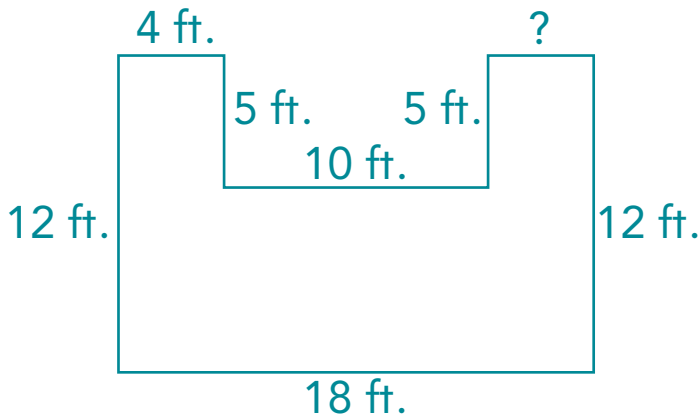
Missing Side: 1 m.

Perimeter: 38 ft.



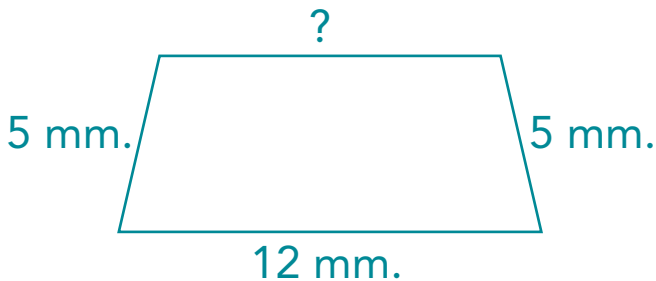
Missing Side: 3 ft.

## Perimeter: Unknown



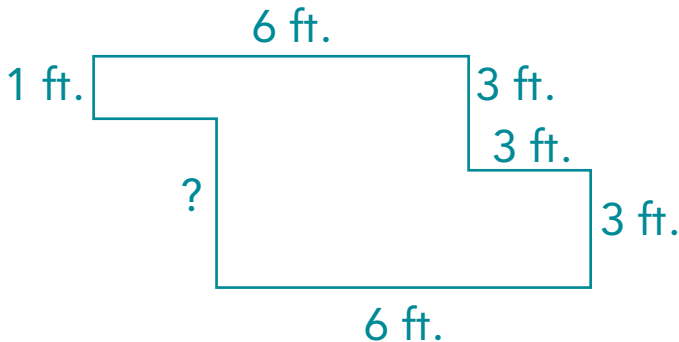
Missing Side: 4 ft.

Perimeter: 29 mm.



Missing Side: 7 mm.

## Perimeter: Unknown



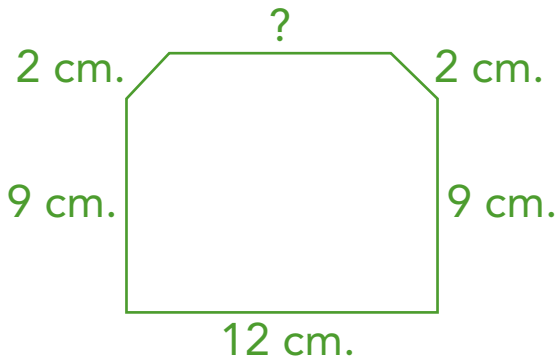
Missing Side: 5 ft.

Trey has a square garden. One side of the garden is 12 feet. What is the perimeter of Trey's garden? (Hint: Draw a model.)

Answer: 48 ft.

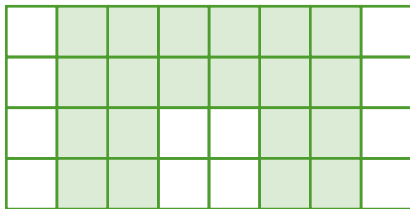
Find the missing side on the figure below.

Perimeter: 40 centimeters



Answer: 6 cm.

What is the perimeter of the shaded part of the figure below?



$$\square = 1 \text{ sq. ft.}$$

Answer: 24 ft.

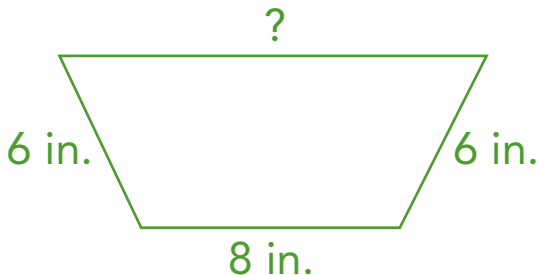
Jenny and Abigail compared their rug sizes.  
Which of their rugs has a larger perimeter?



Answer: Abigail

Find the missing side on the figure below.

Perimeter: 34 inches

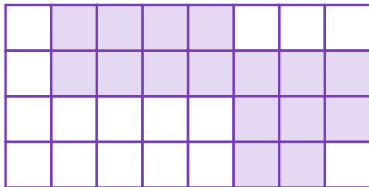


Answer: 14 in.

Erica has a square tile that has a side length of 8 inches. She then has a rectangular tile that has side lengths of 14 inches and 5 inches. Which tile has a larger perimeter? The square or rectangle? (Hint: Draw a model to solve.)

Answer: Rectangle

$\square = 1 \text{ sq. ft.}$



Area of shading: 16 sq. ft.



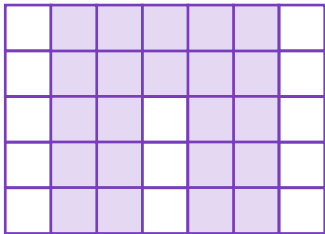
Area: 32 sq. ft.



12 in.

Area: 144 sq. ft.

 = 1 sq. ft.

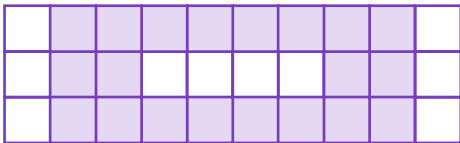


Area of shading: 22 sq. ft.



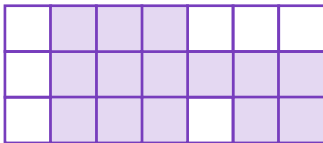
Area: 55 sq. ft.

$\square = 1 \text{ sq. ft.}$



Area of shading: 20 sq. ft.

 = 1 sq. ft.



Area of shading: 14 sq. ft.



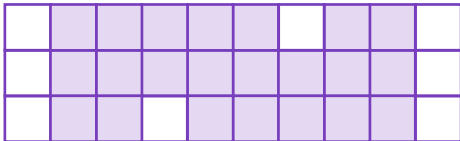
Area: 27 sq. ft.



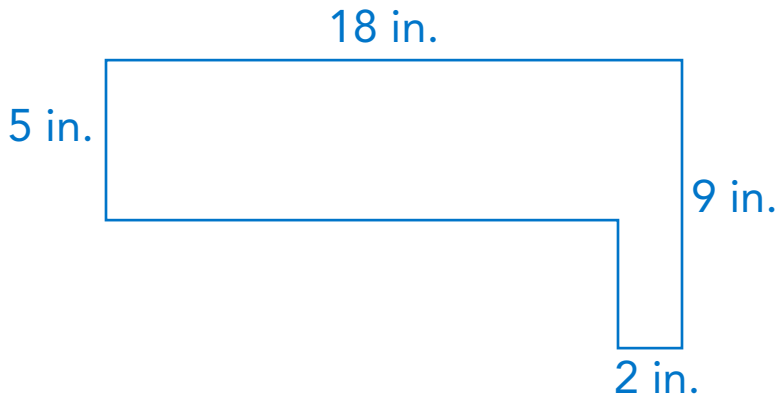
10 mm.

Area: 100 mm.

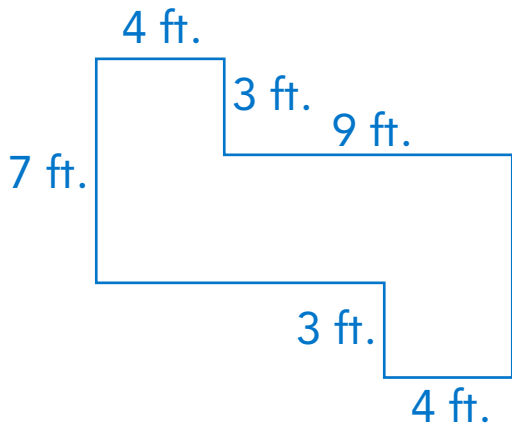
 = 1 sq. ft.



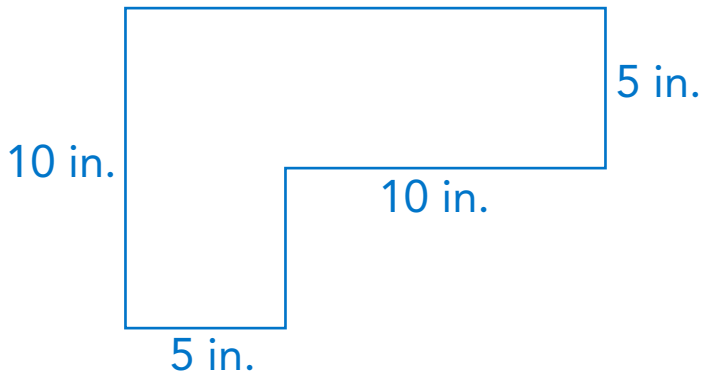
Area of shading: 22 sq. ft.



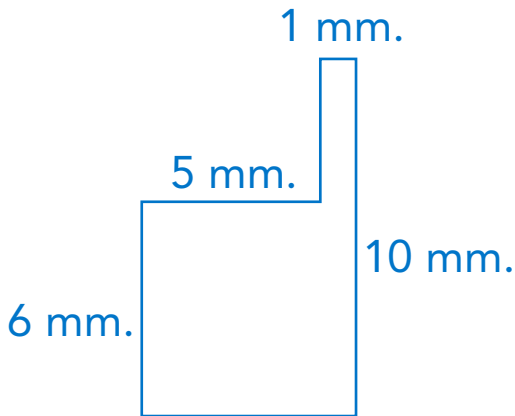
Area: 98 sq. ft.



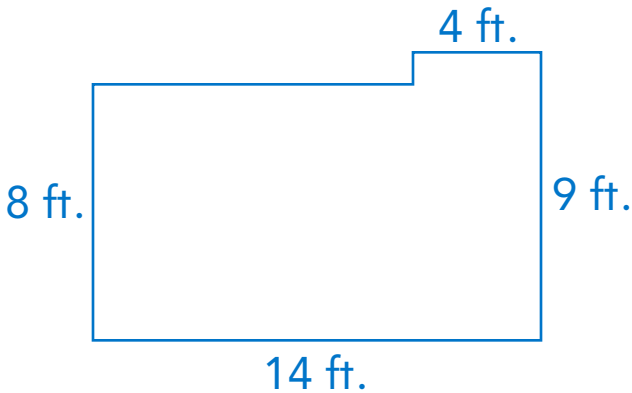
Area: 76 sq. ft.



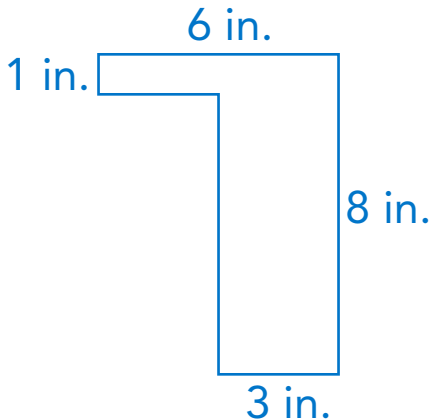
Area: 100 sq. in.



Area: 40 sq. mm.



Area: 116 sq. ft.

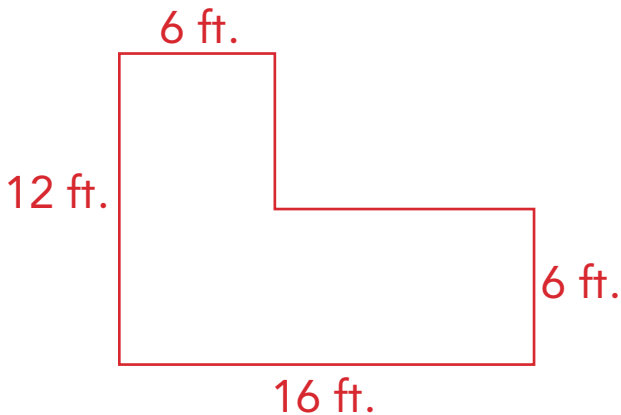


Area: 27 sq. in.

Thomas had a square rug that measured 11 feet on one side and Daisy had a rectangular rug that measured 5 feet by 12 feet. Whose rug had a larger area? (Hint: Draw a model to solve.)

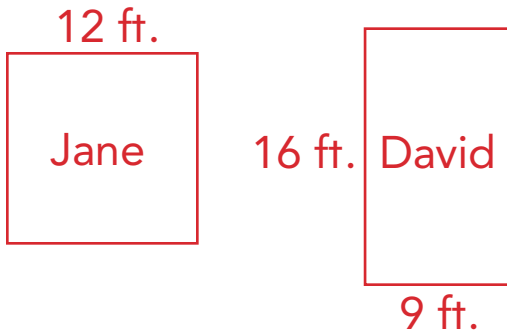
Answer: Thomas

Find the area of the figure below.



Answer: 99 sq. ft.

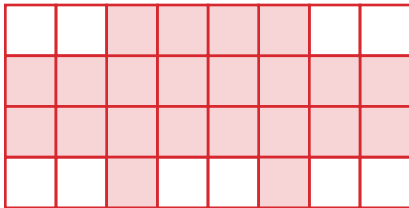
David and Jane compared their garden sizes.  
Which of their gardens has a larger area?



Answer: Both gardens have the same area.

What is the area of the shaded part of the figure below?

$$\square = 1 \text{ sq. ft.}$$



Answer: 22 sq. ft.

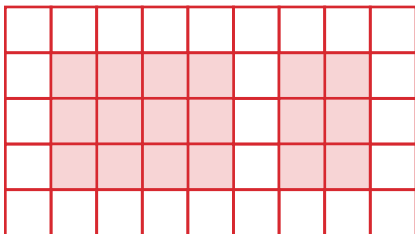
Which figure has the greatest area?



Answer:           A.

Kate and John drew two rectangles. How much larger is Kate's rectangle than John's rectangle?

$$\square = 2 \text{ sq. ft.}$$



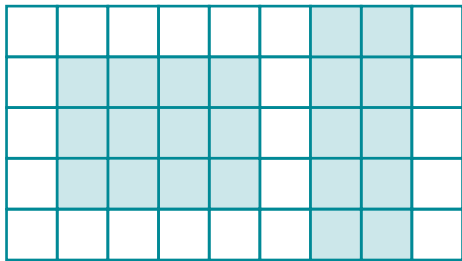
Kate

John

Answer: Kate's rectangle is 12 sq. ft. larger.

Frank planted two patches of grass in his backyard. Which patch has a greater area, Patch A or Patch B?

 = 1 sq. unit

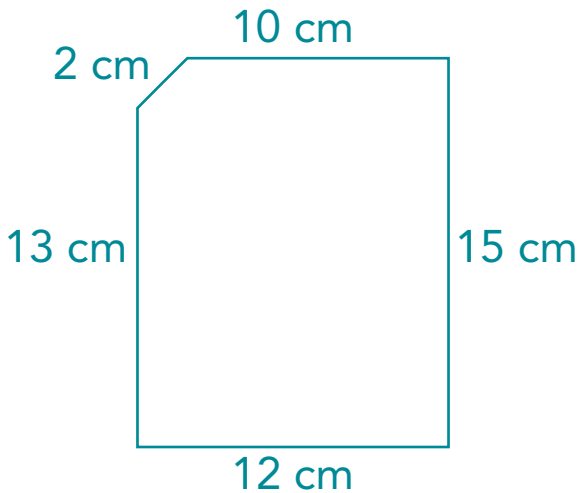


Patch A

Patch B

**Patch A**

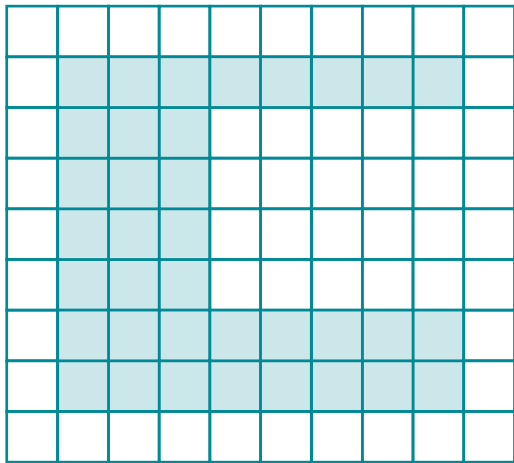
Find the perimeter of the figure below.



**52 cm.**

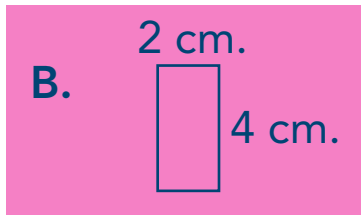
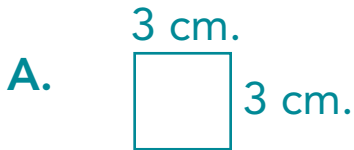
Find the perimeter of the shaded figure below.

 = 1 sq. unit

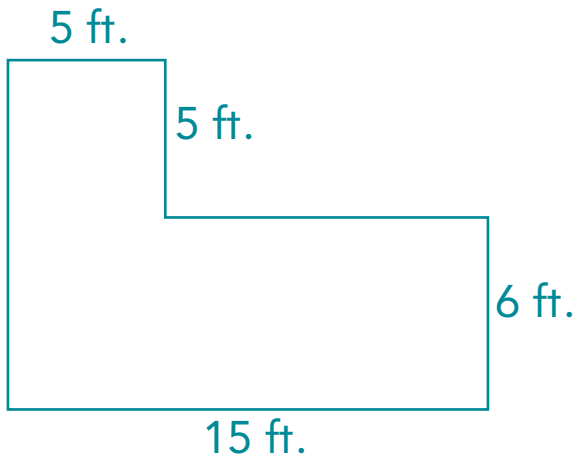


**36 sq. units**

Which figure below has the smallest area?

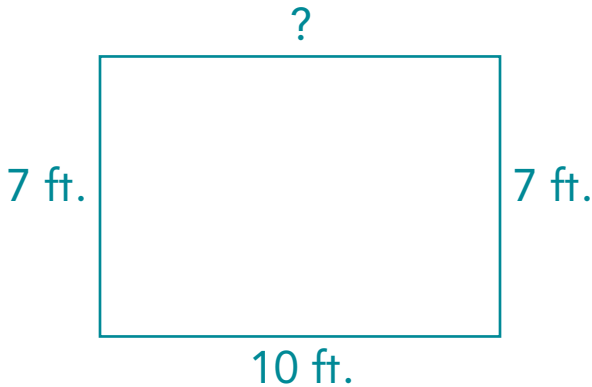


Find the area of the figure below.



**115 sq. ft.**

Find the missing side on the figure below.



10 ft.

# Customary Units of Weight

Determine which would be the best estimate for each object.

bicycle 40 lb. or 40 oz.	hippopotamus 6 T. or 600 lb.	pencil 4 oz. or 4 T.
desk 6 T. or 60 lb.	chip 3 lb. or 3 oz.	basketball 5 lb. or 5 oz.

# Metric Units of Weight

Determine which would be the best estimate for each object.

book 1 g. or 1 kg.	crayon 4 g. or 4 mg.	chair 40 g. or 40 kg.
gallon of milk 60 g. or 2 kg.	sock 5 mg. or 15 g.	soccer ball 20 g. or 2 kg.

# Customary Units of Capacity

Determine which would be the best estimate for each object.

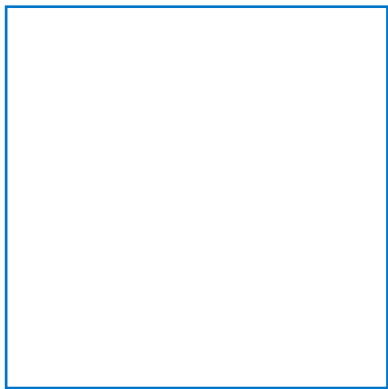
fishbowl 1 pt. or 1 gal.	watering can 2 gal. or 6 c.	mug of coffee 1 c. or 1 qt.
paint container 2 gal. or 20 pt.	kiddie pool 10 gal. or 10 qt.	syrup bottle 2 qt. or 3 gal.

# Metric Units of Capacity

Determine which would be the best estimate for each object.

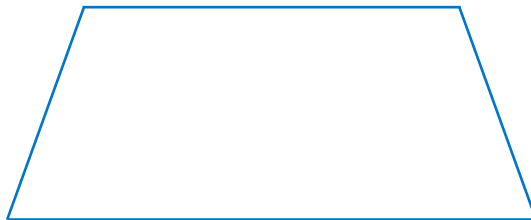
fish tank 10 mL. or 10 L.	soda can 100 mL. or 100 L.	bathtub 50 L. or 50 mL.
bottle cap 2 mL. or 2 L.	watering can 5 L. or 25 mL.	test tube 10 mL. or 1 L.

Measure in inches



Area: 4 sq. in.

Measure in centimeters



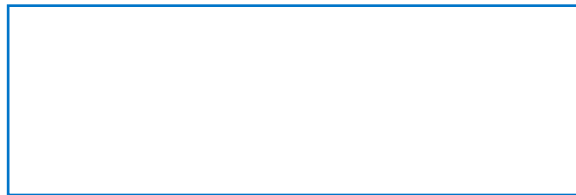
Perimeter: 15 cm

Measure in centimeters



Area: 6 sq. cm.

Measure in inches

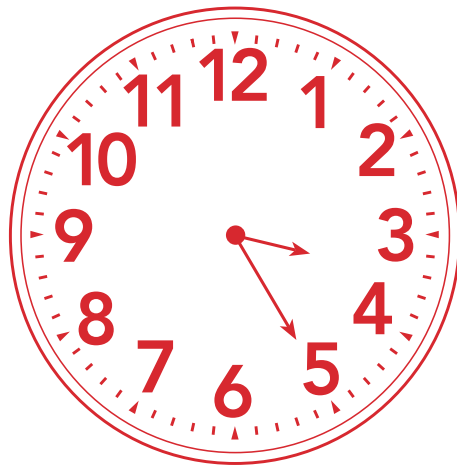


Perimeter: 12 in.

Determine which would be the best estimate for each object.

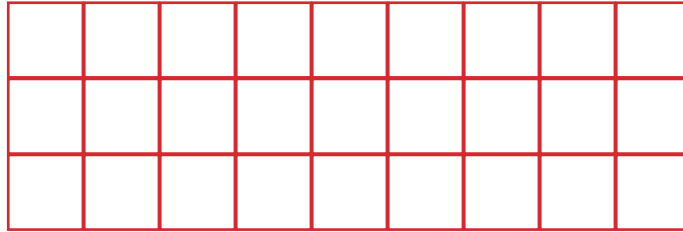
height of a door inches or feet	paperclip centimeters or inches	pencil inches or feet
sticky note centimeters or feet	candle feet or inches	table feet or centimeters

Katie's dad said she could play outside until 5 p.m. If Katie goes outside at the time on her clock below, how long will she be able to play outside? Solve and write your answer on your recording sheet.



1:35

Find the area of the figure below. Each unit is 2 square meters.



108 sq. m.

Jenny drew a square with sides that were 8 inches each. What is the perimeter of Jenny's square?

32 in.

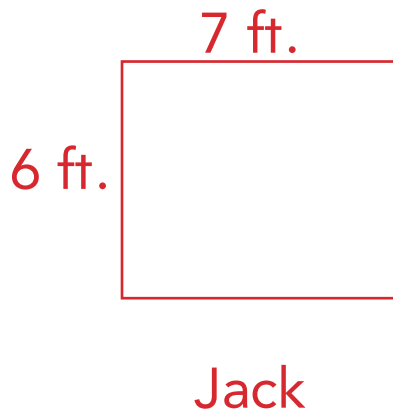
Stacey has 5 liters of water. How many millimeters of water does Stacey have? (Hint: Use your reference sheet)

- A. 500 mL.
- B. 450 mL.
- C. 5,000 mL.
- D. 50,000 mL.

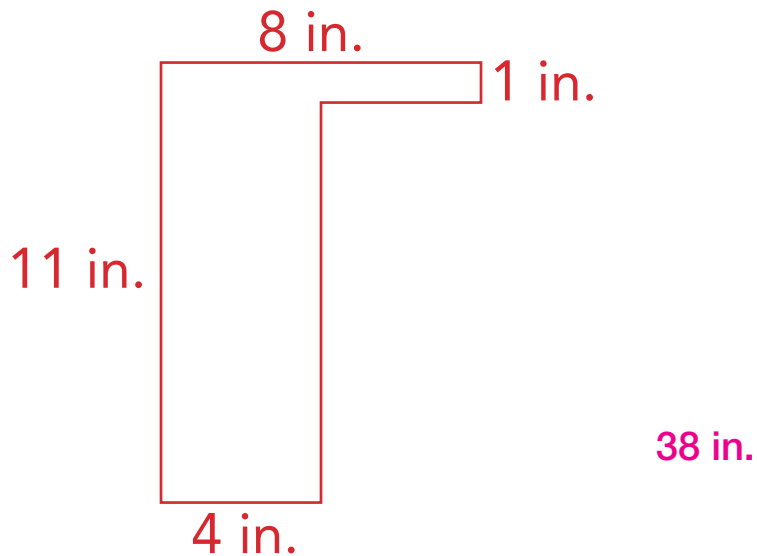
Robin and Jack both bought rugs for their living rooms. Whose rug has a larger area? How much larger is the area of the bigger rug?



Robin's rug has the larger area by 2 sq. ft.



Find the perimeter of the figure below.



Which of the following could best be measured in grams?

A. how heavy an elephant is

B. how heavy a fly is

C. how heavy a car is

D. how heavy a building is

Maddie came home from school at 3:45 and did her chores for 15 minutes, worked on homework for 55 minutes, and then walked her dog for 20 minutes. What time did Maddie finish all her tasks?

A. 4:45

B. 4:55

C. 5:05

D. 5:15

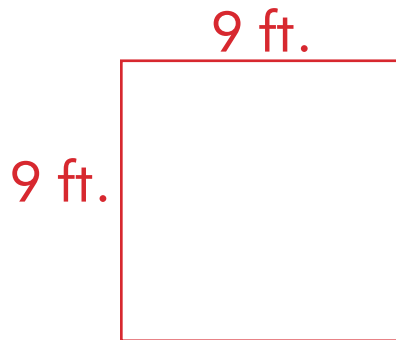
Doug drew the figure below. Which equation can be used to find the perimeter?

A.  $9 + 9 = 18$  ft.

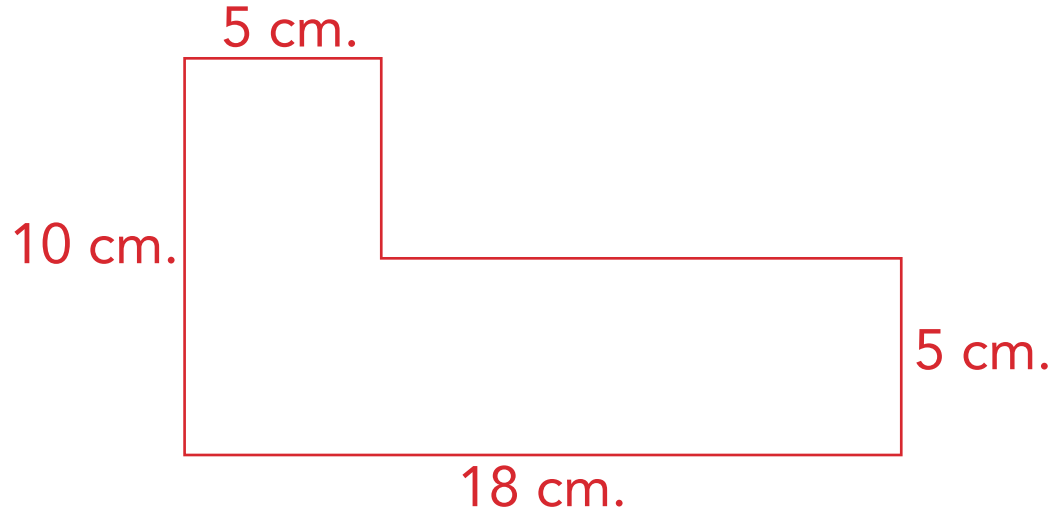
B.  $9 \times 4 = 36$  ft.

C.  $9 \times 9 = 81$  ft.

D.  $9 + 9 \times 9 = 90$  ft.



# What is the area of the figure below?



115 sq. cm.

Ron is meeting his friends at 8:00 for a movie.  
If it takes 15 minutes to drive to the theater and  
10 minutes to get ready, what time should Ron start  
getting ready? Solve and write your answer below.

7:35

# Which is the best estimate for the capacity of a bathtub?

- A. 10 quarts
- B. 10 cups
- C. 10 gallons
- D. 10 pints