

Lesson 7.7 Meters and Kilometers

$$100 \text{ centimeters (cm)} = 1 \text{ meter (m)}$$

$$100 \text{ cm} = 1 \text{ m}$$

$$1,000 \text{ meters (m)} = 1 \text{ kilometer (km)}$$

$$1,000 \text{ m} = 1 \text{ km}$$

Find the length of each of the following objects around your home to the nearest meter.

	Object	Length (m)
1.	width of TV screen	_____ m
2.	height of stove	_____ m
3.	height of computer	_____ m
4.	width of your bed	_____ m
5.	height of TV	_____ m
6.	your height	_____ m
7.	width of a window	_____ m

Complete the following.

a

8. $600 \text{ cm} = \underline{\hspace{2cm}} \text{ m}$

9. $7 \text{ m} = \underline{\hspace{2cm}} \text{ cm}$

10. $7 \text{ km} = \underline{\hspace{2cm}} \text{ m}$

11. $8 \text{ m} = \underline{\hspace{2cm}} \text{ cm}$

12. $2 \text{ km} = \underline{\hspace{2cm}} \text{ m}$

b

$9,000 \text{ m} = \underline{\hspace{2cm}} \text{ km}$

$10,000 \text{ m} = \underline{\hspace{2cm}} \text{ km}$

$23 \text{ km} = \underline{\hspace{2cm}} \text{ m}$

$32 \text{ m} = \underline{\hspace{2cm}} \text{ cm}$

$14 \text{ m} = \underline{\hspace{2cm}} \text{ cm}$

Lesson 7.8 Units of Length (millimeters, centimeters, meters, and kilometers)

$7 \text{ cm} = \underline{\hspace{1cm}} \text{ mm}$ $1 \text{ cm} = 10 \text{ mm}$ $\begin{array}{r} \downarrow \quad \downarrow \\ \times 7 \quad \times 10 \\ \hline 7 \quad 70 \\ \downarrow \quad \downarrow \\ 7 \text{ cm} = 70 \text{ mm} \end{array}$	$3 \text{ m} = \underline{\hspace{1cm}} \text{ mm}$ $1 \text{ m} = 1,000 \text{ mm}$ $\begin{array}{r} \downarrow \quad \downarrow \\ \times 3 \quad \times 1000 \\ \hline 3 \quad 3000 \\ \downarrow \quad \downarrow \\ 3 \text{ m} = 3,000 \text{ mm} \end{array}$	$32 \text{ m} = \underline{\hspace{1cm}} \text{ cm}$ $1 \text{ m} = 100 \text{ cm}$ $\begin{array}{r} \downarrow \quad \downarrow \\ \times 32 \quad \times 100 \\ \hline 32 \quad 3200 \\ \downarrow \quad \downarrow \\ 32 \text{ m} = 3,200 \text{ cm} \end{array}$	$15 \text{ km} = \underline{\hspace{1cm}} \text{ m}$ $1 \text{ km} = 1,000 \text{ m}$ $\begin{array}{r} \downarrow \quad \downarrow \\ \times 15 \quad \times 1000 \\ \hline 15 \quad 15000 \\ \downarrow \quad \downarrow \\ 15 \text{ km} = 15,000 \text{ m} \end{array}$
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Complete the following.

a

1. $4 \text{ m} = \underline{\hspace{1cm}} \text{ cm}$

2. $21 \text{ km} = \underline{\hspace{1cm}} \text{ m}$

3. $33 \text{ m} = \underline{\hspace{1cm}} \text{ cm}$

4. $15 \text{ m} = \underline{\hspace{1cm}} \text{ cm}$

5. $5 \text{ km} = \underline{\hspace{1cm}} \text{ m}$

6. $75 \text{ m} = \underline{\hspace{1cm}} \text{ cm}$

7. $10 \text{ km} = \underline{\hspace{1cm}} \text{ m}$

8. $21 \text{ cm} = \underline{\hspace{1cm}} \text{ mm}$

b

$25 \text{ m} = \underline{\hspace{1cm}} \text{ mm}$

$25 \text{ cm} = \underline{\hspace{1cm}} \text{ mm}$

$14 \text{ km} = \underline{\hspace{1cm}} \text{ m}$

$47 \text{ m} = \underline{\hspace{1cm}} \text{ mm}$

$84 \text{ cm} = \underline{\hspace{1cm}} \text{ mm}$

$72 \text{ m} = \underline{\hspace{1cm}} \text{ cm}$

$66 \text{ m} = \underline{\hspace{1cm}} \text{ mm}$

$19 \text{ km} = \underline{\hspace{1cm}} \text{ m}$

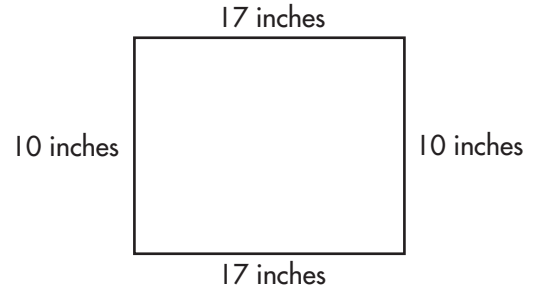
Lesson 7.9 Measuring Perimeter

Perimeter is the distance around a shape.

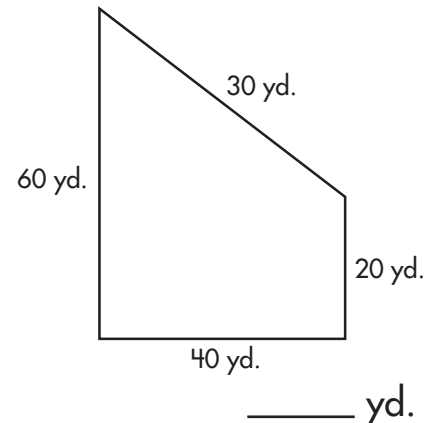
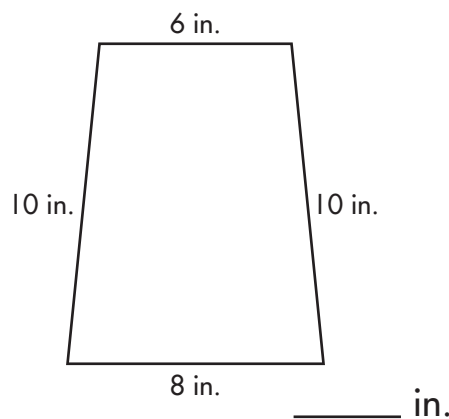
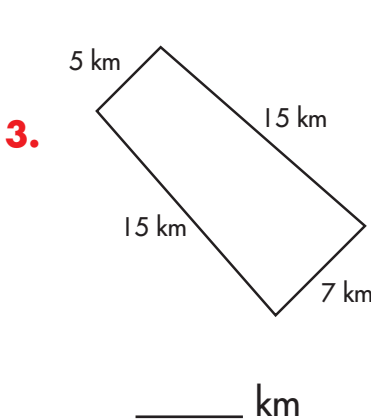
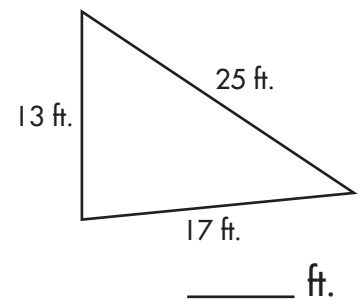
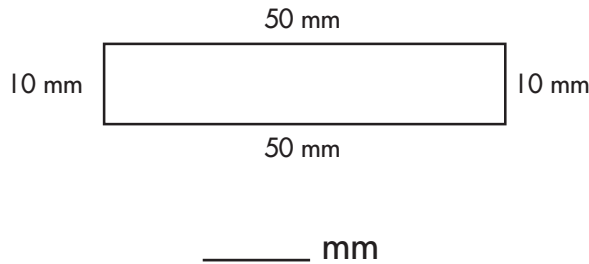
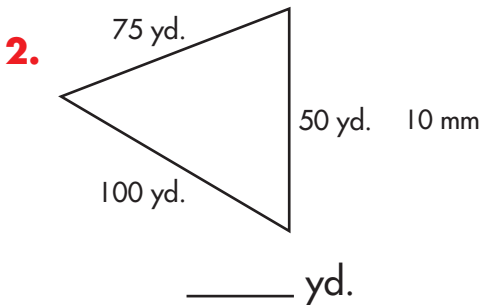
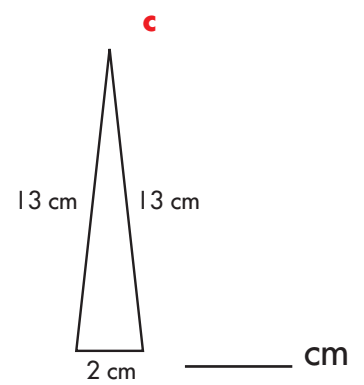
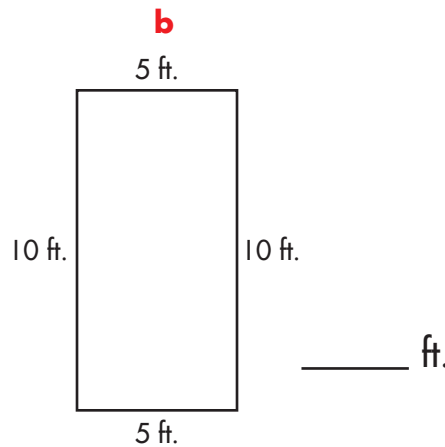
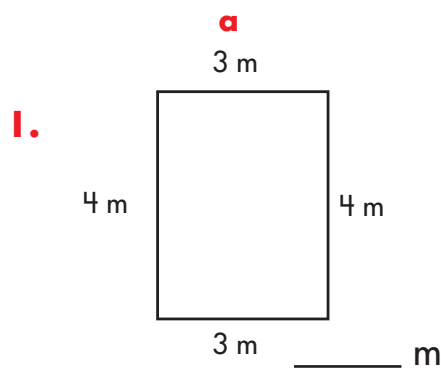
To calculate perimeter, add together the lengths of all the sides.

$$\text{Perimeter} = 17 \text{ in.} + 10 \text{ in.} + 17 \text{ in.} + 10 \text{ in.}$$

$$\text{Perimeter} = 54 \text{ in.}$$



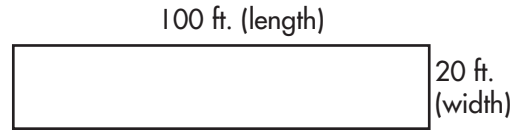
Find the perimeter of each shape.



Lesson 7.10 Measuring Area

Area is the amount of space a shape covers.
To find the area of a square or rectangle,
multiply length by width.

$$\text{Area} = 100 \text{ ft.} \times 20 \text{ ft.} = 2,000 \text{ sq. ft.}$$



Find the area of each shape.

1. **a**

A rectangle is shown with its top side labeled "15 in." and its left side labeled "12 in.".

_____ sq. in.

b

A square is shown with its top side labeled "12 mm" and its left side labeled "12 mm".

_____ sq. mm

c

A rectangle is shown with its top side labeled "12 ft." and its left side labeled "11 ft.".

_____ sq. ft.

2.

A rectangle is shown with its top side labeled "10 yd." and its left side labeled "25 yd.".

_____ sq. yd.

A rectangle is shown with its top side labeled "5 in." and its right side labeled "8 in.".

_____ sq. in.

A rectangle is shown with its top side labeled "12 m" and its left side labeled "40 m".

_____ sq. m

3. **a**

A rectangle is shown with its top side labeled "23 yd." and its right side labeled "8 yd.".

_____ sq. yd.

b

A rectangle is shown with its top side labeled "20 km" and its left side labeled "4 km".

_____ sq. km

Lesson 7.11 Problem Solving**SHOW YOUR WORK**

Solve each problem.

- 1.** John cleared a vacant lot to plant a garden. The lot measured 35 feet by 15 feet. What is the perimeter of the garden lot?

The perimeter of the lot is _____ feet.

- 2.** Freda is putting carpet down in a room that measures 20 feet long by 30 feet wide. What is the area of the room?

The area is _____ square feet.

- 3.** The zoo is building a new hippo pool that will measure 55 feet by 75 feet. What is the area of the pool?

The area is _____ square feet.

- 4.** Gabriel built a cage for his tropical birds. The cage measures 14 feet by 12 feet. What is the perimeter of the cage?

The perimeter of the cage is _____ feet.

- 5.** The Foster's deck was almost finished. Each side of the square deck was 25 feet long. What was the area of the deck?

The area was _____ square feet.

- 6.** The length of the walking track is 103 feet and the width is 50 feet. What is the perimeter of the track?

The perimeter is _____ feet.

- 7.** The college donated land for a park. The land is 750 feet long and 25 feet wide. What is the area of the land?

The area is _____ square feet.

1.**2.****3.****4.****5.****6.****7.**