

Name: \_\_\_\_\_

Date: \_\_\_\_\_

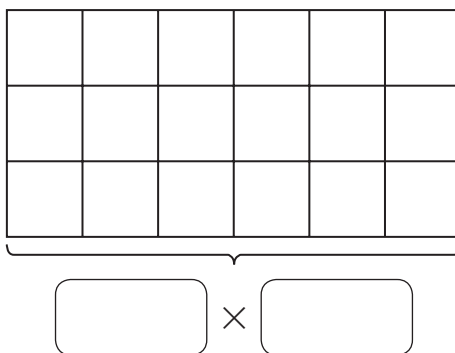
CHAPTER  
**19**

# Area and Perimeter

## Worksheet 1 Area

Look at the area model and complete.

1.

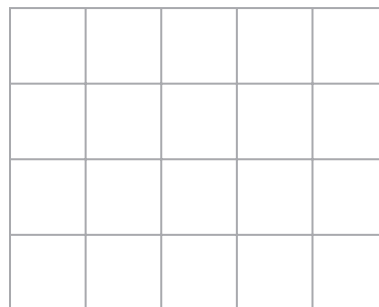
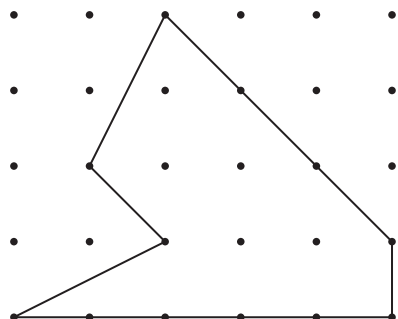


$$\underline{\hspace{2cm}} \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}} + \underline{\hspace{2cm}} + \underline{\hspace{2cm}}$$

$$= \underline{\hspace{2cm}}$$

Draw an identical shape on the square grid paper.

2.

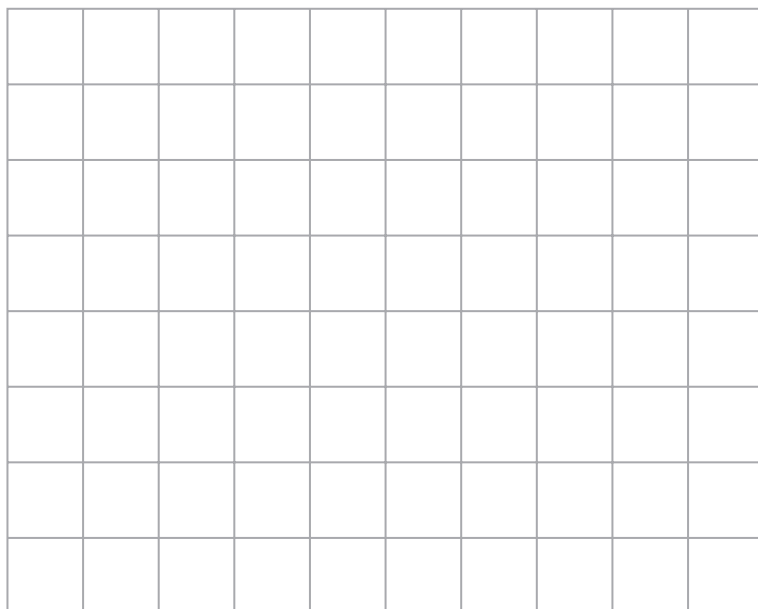


Name: \_\_\_\_\_

Date: \_\_\_\_\_

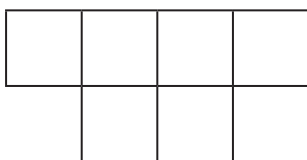
Make a figure using four squares ( $\square$ ) and four half-squares ( $\triangle$ ) .

3.



Each square ( $\square$ ) is 1 square unit.  
Find the area of each figure.

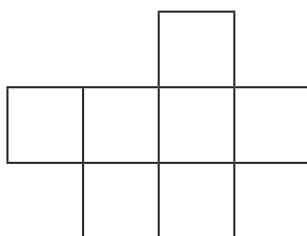
Example



Area = 6 square units

**Area** is the amount  
of surface covered.  
It is measured in  
**square units.**

4.

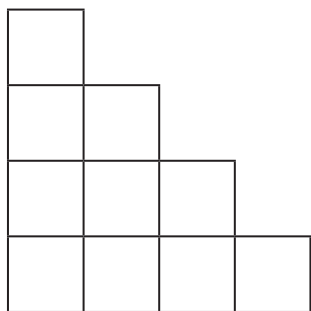


Area = \_\_\_\_\_ square units

Name: \_\_\_\_\_

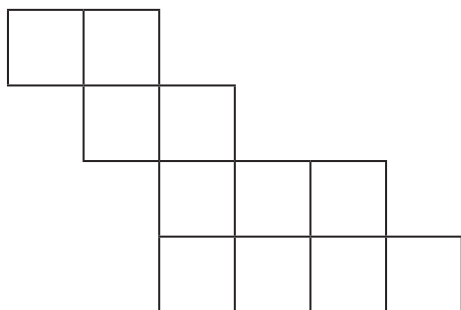
Date: \_\_\_\_\_

5.



Area = \_\_\_\_\_ square units

6.



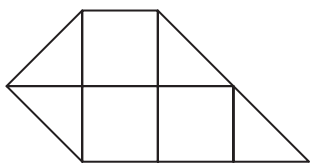
Area = \_\_\_\_\_ square units

**Each square (□) is 1 square unit.**

**Each half-square (◻) is  $\frac{1}{2}$  square unit.**

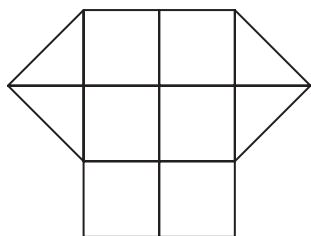
**Find the area of each figure.**

*Example*



Area = 5 square units

7.



Area = \_\_\_\_\_ square units

Name: \_\_\_\_\_

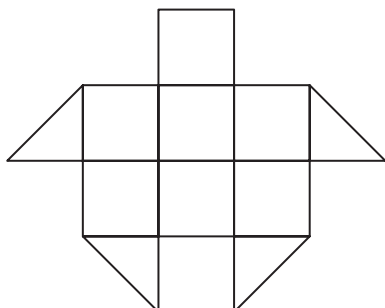
Date: \_\_\_\_\_

Each square ( $\square$ ) is 1 square unit.

Each half-square ( $\triangle$ ) is  $\frac{1}{2}$  square unit.

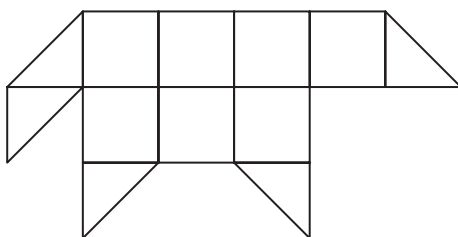
Find the area of each figure.

8.



Area = \_\_\_\_\_ square units

9.

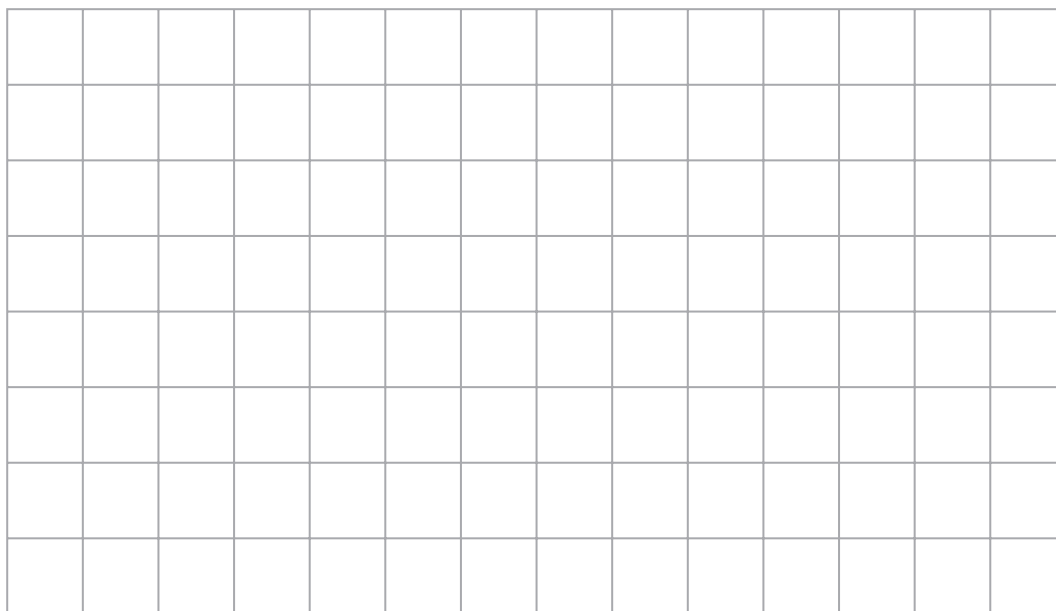


Area = \_\_\_\_\_ square units

Draw and color two figures each with an area of 8 square units.

Use  $\square$  as 1 square unit and  $\triangle$  as  $\frac{1}{2}$  square unit.

10.



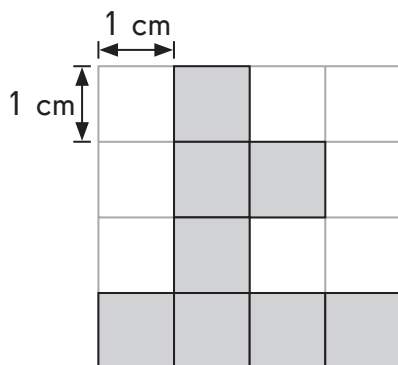
Name: \_\_\_\_\_

Date: \_\_\_\_\_

## Worksheet 2 Square Units ( $\text{cm}^2$ and $\text{in}^2$ )

Find the area of each shaded figure.

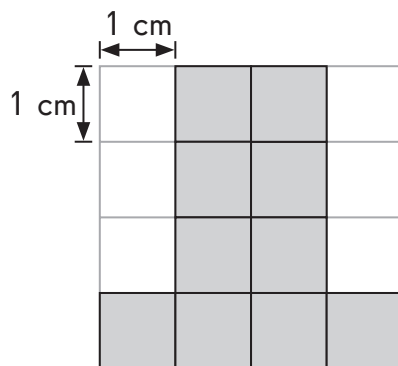
*Example*



The **square centimeter ( $\text{cm}^2$ )** is a metric unit of measure for area. The area of each  $\square$  is 1 square centimeter.

Area of the shaded figure = 8  $\text{cm}^2$

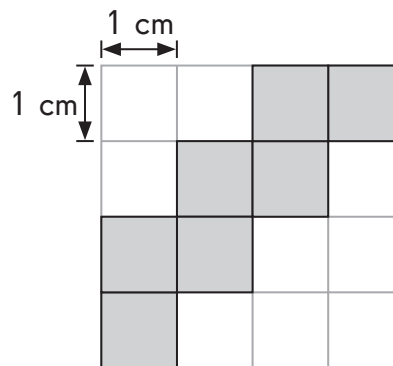
1.



Area of the shaded figure

= \_\_\_\_\_  $\text{cm}^2$

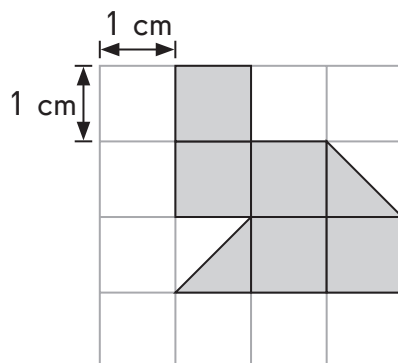
2.



Area of the shaded figure

= \_\_\_\_\_  $\text{cm}^2$

3.



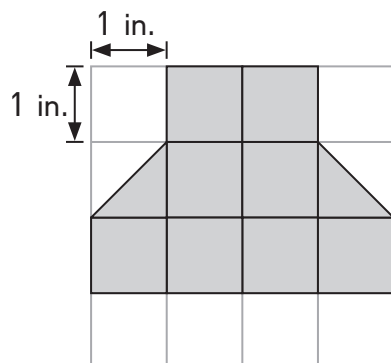
Area of the shaded figure = \_\_\_\_\_  $\text{cm}^2$

Name: \_\_\_\_\_

Date: \_\_\_\_\_

## Find the area of each shaded figure.

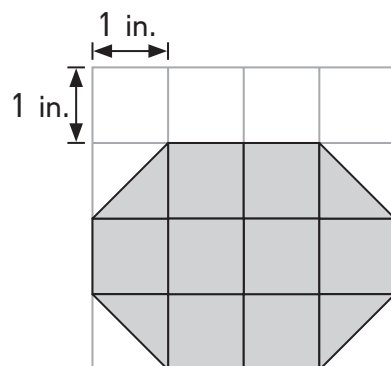
Example



The **square inch (in.<sup>2</sup>)** is a customary unit of measure for area. The area of each  $\square$  is 1 square inch.

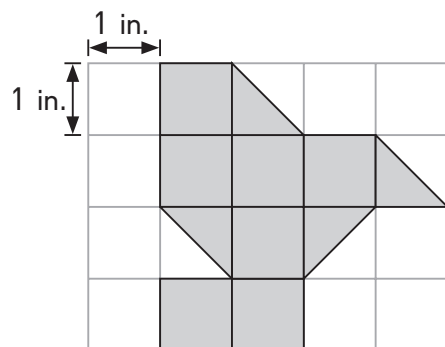
Area of the shaded figure = 9 in.<sup>2</sup>

4.



Area of the shaded figure = \_\_\_\_\_ in.<sup>2</sup>

5.



Area of the shaded figure = \_\_\_\_\_ in.<sup>2</sup>

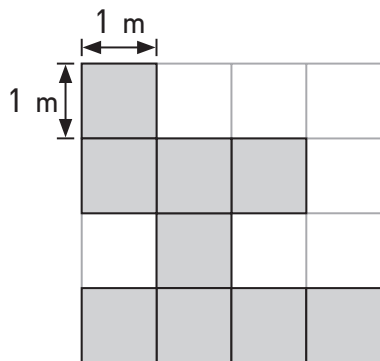
These inch squares are smaller than in real life.



## Worksheet 3 Square Units ( $\text{m}^2$ and $\text{ft}^2$ )

Find the area of each shaded figure.

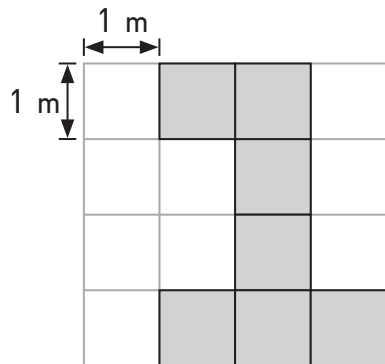
*Example*



The **square meter ( $\text{m}^2$ )** is also a metric unit of measure for area.  
1 square meter ( $\text{m}^2$ ) is larger than 1 square centimeter ( $\text{cm}^2$ ).

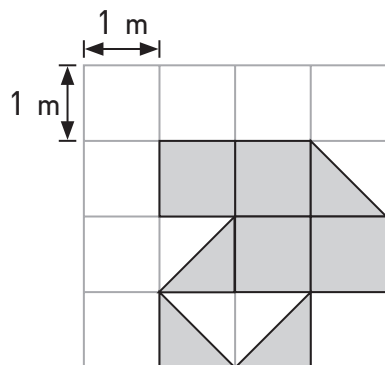
Area of the shaded figure = 9  $\text{m}^2$

1.



Area of the shaded figure = \_\_\_\_\_  $\text{m}^2$

2.



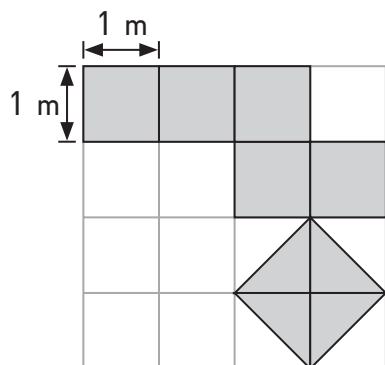
Area of the shaded figure = \_\_\_\_\_  $\text{m}^2$

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**Find the area of the shaded figure.**

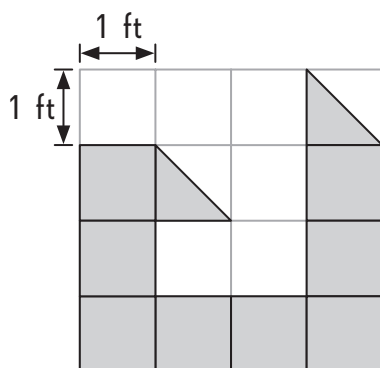
**3.**



Area of the shaded figure = \_\_\_\_\_  $\text{m}^2$

**Find the area of each shaded figure.**

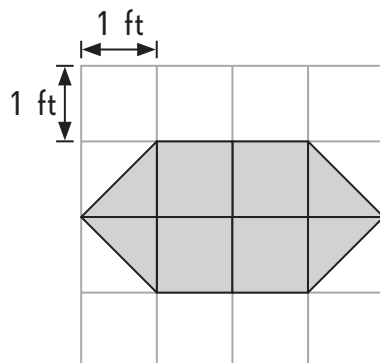
*Example*



The **square foot ( $\text{ft}^2$ )** is also a customary unit of measure for area. 1 square foot ( $\text{ft}^2$ ) is larger than 1 square inch ( $\text{in.}^2$ ).

Area of the shaded figure = 9  $\text{ft}^2$

**4.**



Area of the shaded figure = \_\_\_\_\_  $\text{ft}^2$



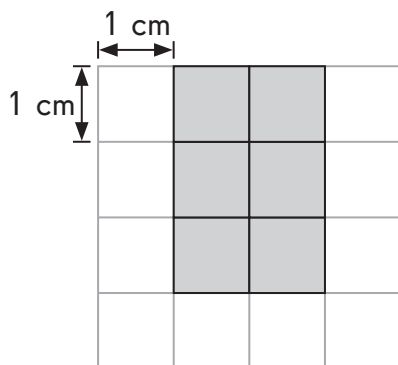
Name: \_\_\_\_\_

Date: \_\_\_\_\_

## Worksheet 4 Perimeter and Area

Find the perimeter of each shaded figure.

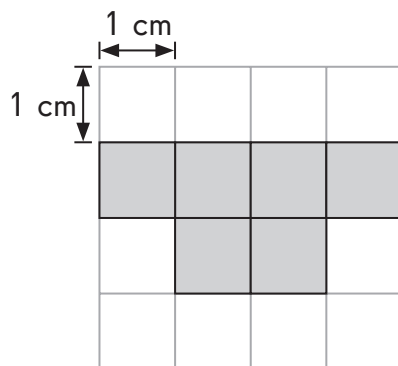
Example



The **perimeter** of the figure is the distance around it.

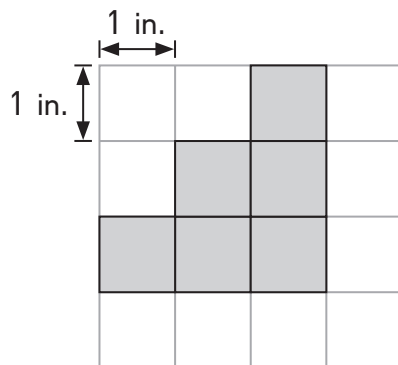
Perimeter of the shaded figure = 10 cm

1.



Perimeter of the shaded figure = \_\_\_\_\_ cm

2.



These inch squares are smaller than in real life.



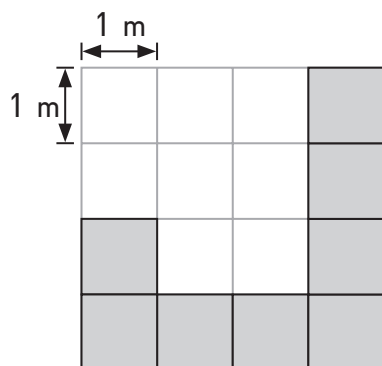
Perimeter of the shaded figure = \_\_\_\_\_ in.

Name: \_\_\_\_\_

Date: \_\_\_\_\_

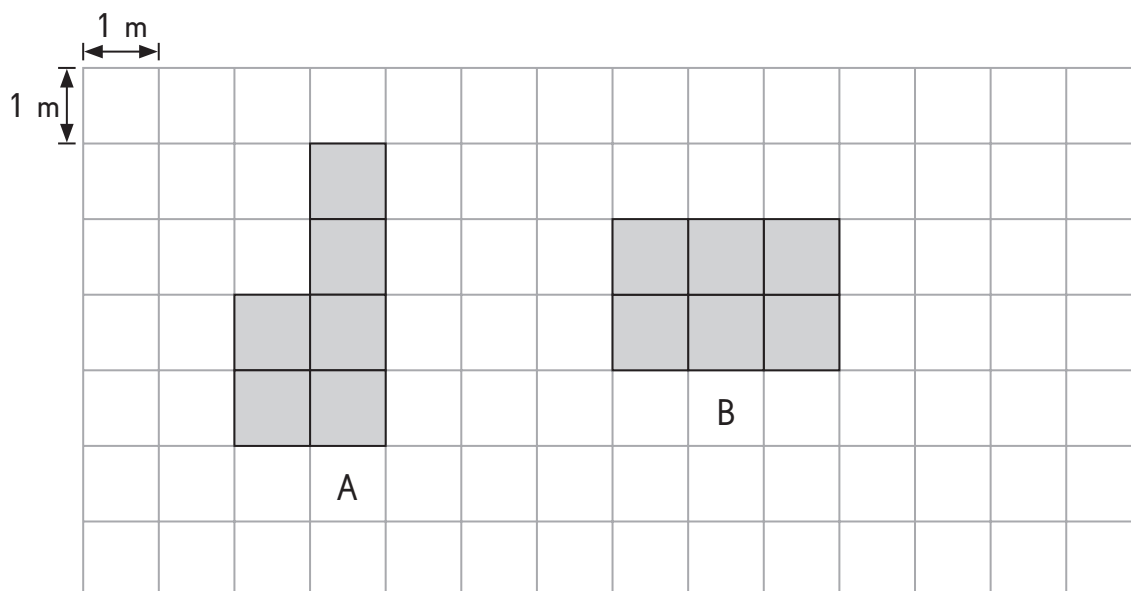
**Find the perimeter of the shaded figure.**

**3.**



Perimeter of the shaded figure = \_\_\_\_\_ m

**Look at the figures. Then fill in the blanks.**



**4.** Perimeter of Figure A = \_\_\_\_\_ m

Area of Figure A = \_\_\_\_\_ m<sup>2</sup>

**5.** Perimeter of Figure B = \_\_\_\_\_ m

Area of Figure B = \_\_\_\_\_ m<sup>2</sup>

Name: \_\_\_\_\_

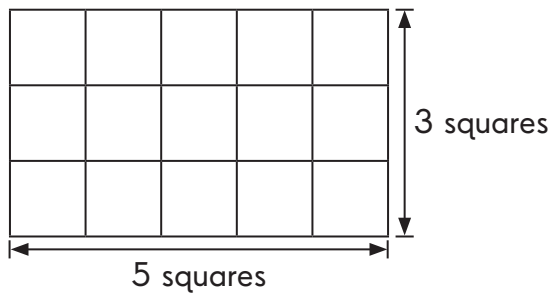
Date: \_\_\_\_\_

6. Do Figures A and B have the same area? \_\_\_\_\_

7. Do Figures A and B have the same perimeter? \_\_\_\_\_

**Find the area of each figure in two ways.**

*Example*



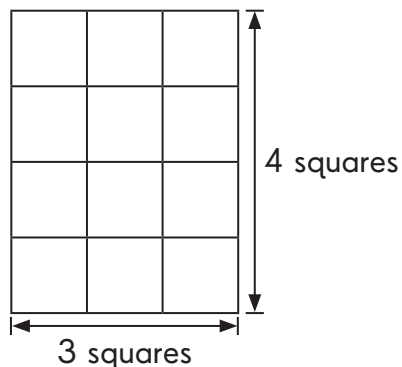
**a.** By counting:

Area = 15 square units

**b.** By multiplying:

Area = 5  $\times$  3  
= 15 square units

**8.**



**a.** By counting:

Area = \_\_\_\_\_ square units

**b.** By multiplying:

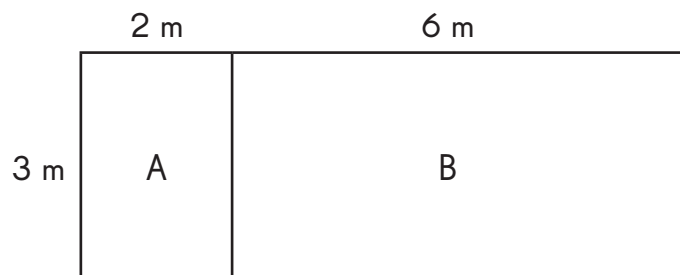
Area = \_\_\_\_\_  $\times$  \_\_\_\_\_  
= \_\_\_\_\_ square units

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**Find the area of each figure.**

**9.**



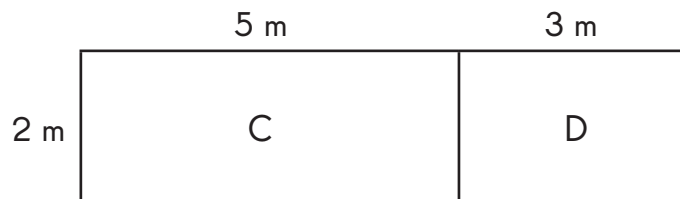
Area of A = \_\_\_\_\_  $\times$  \_\_\_\_\_ = \_\_\_\_\_  $\text{m}^2$

Area of B = \_\_\_\_\_  $\times$  \_\_\_\_\_ = \_\_\_\_\_  $\text{m}^2$

Area of figure = \_\_\_\_\_ + \_\_\_\_\_

= \_\_\_\_\_  $\text{m}^2$

**10.**



Area of C = \_\_\_\_\_  $\times$  \_\_\_\_\_ = \_\_\_\_\_  $\text{m}^2$

Area of D = \_\_\_\_\_  $\times$  \_\_\_\_\_ = \_\_\_\_\_  $\text{m}^2$

Area of figure = \_\_\_\_\_ + \_\_\_\_\_

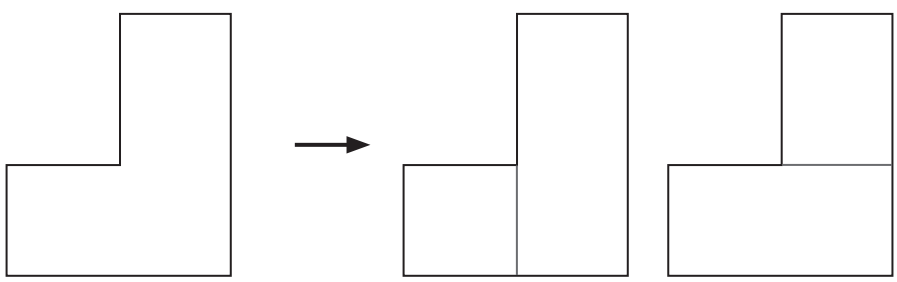
= \_\_\_\_\_  $\text{m}^2$

Name: \_\_\_\_\_

Date: \_\_\_\_\_

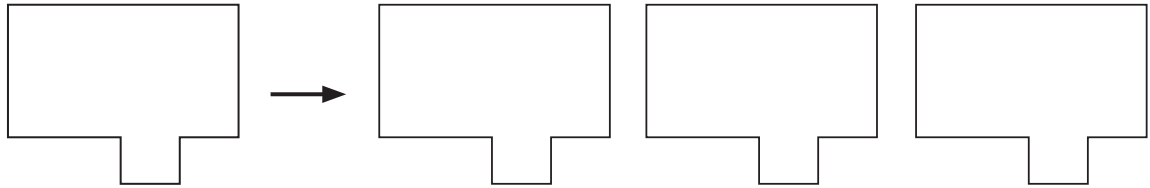
**Draw a line or lines to separate the figure into smaller rectangles or squares.**

*Example*



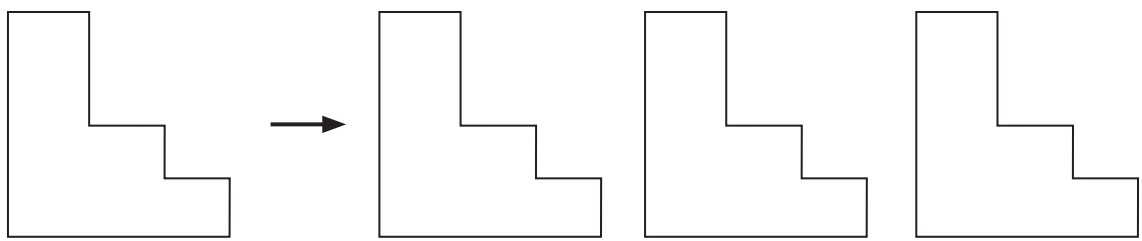
First way      Second way

**11.**



First way      Second way      Third way

**12.**

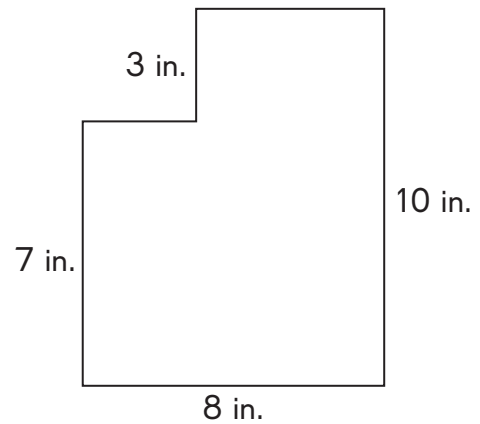


First way      Second way      Third way

Name: \_\_\_\_\_

Date: \_\_\_\_\_

- 13.** James needs square-inch mosaic tiles to cover the area of the figure shown.



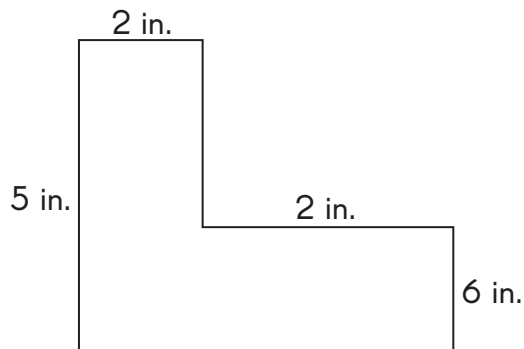
- a.** How many mosaic tiles does James need to buy?
- b.** Each mosaic tile costs \$1. How much does James spend on the mosaic tiles?

Name: \_\_\_\_\_

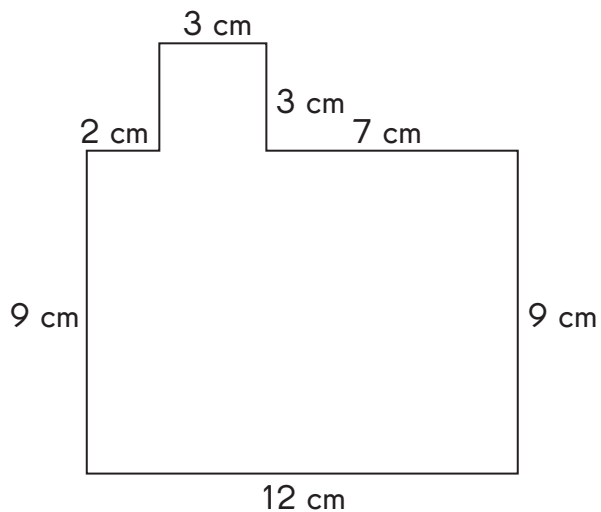
Date: \_\_\_\_\_

**Find the area of the figure by separating it into smaller squares and rectangles. Add the areas to solve.**

**14.**



**15.**



Name: \_\_\_\_\_

Date: \_\_\_\_\_

- 16.** Draw two different rectangles with the same perimeter of 16 squares. State the area of each rectangle.





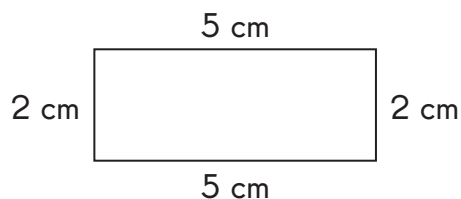
Name: \_\_\_\_\_

Date: \_\_\_\_\_

## Worksheet 5 More Perimeter

Find the perimeter of each figure.

Example

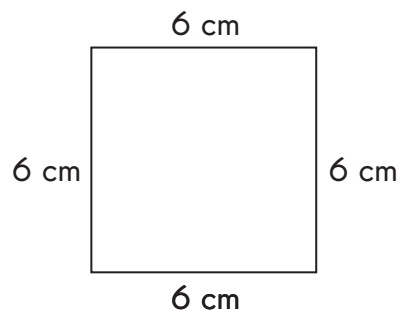


To find the perimeter of a figure, we add up the lengths of all its sides.

$$\begin{aligned}\text{Perimeter} &= \underline{5} + \underline{2} + \underline{5} + \underline{2} \\ &= \underline{14} \text{ cm}\end{aligned}$$

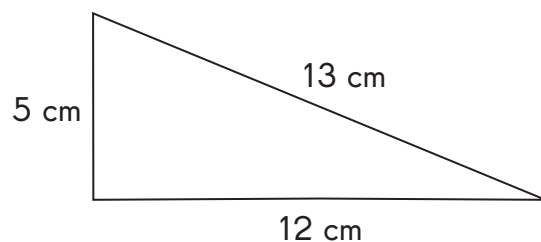


1.



$$\begin{aligned}\text{Perimeter} &= \underline{\quad} + \underline{\quad} + \underline{\quad} + \underline{\quad} \\ &= \underline{\quad} \text{ cm}\end{aligned}$$

2.



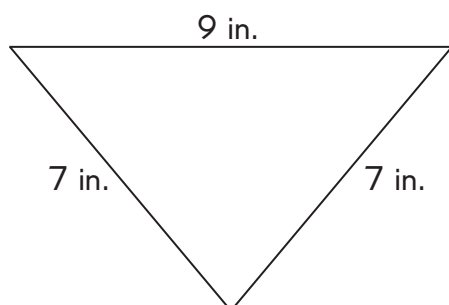
$$\begin{aligned}\text{Perimeter} &= \underline{\quad} + \underline{\quad} + \underline{\quad} \\ &= \underline{\quad} \text{ cm}\end{aligned}$$

Name: \_\_\_\_\_

Date: \_\_\_\_\_

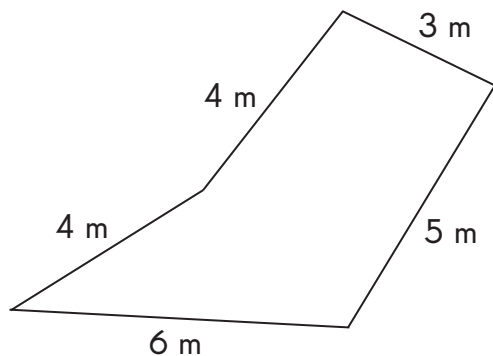
**Find the perimeter of each figure.**

**3.**



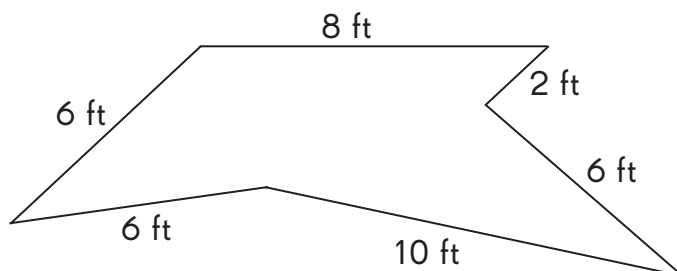
$$\begin{aligned}\text{Perimeter} &= \underline{\hspace{1cm}} + \underline{\hspace{1cm}} + \underline{\hspace{1cm}} \\ &= \underline{\hspace{1cm}} \text{ in.}\end{aligned}$$

**4.**



$$\begin{aligned}\text{Perimeter} &= \underline{\hspace{1cm}} + \underline{\hspace{1cm}} + \underline{\hspace{1cm}} + \underline{\hspace{1cm}} + \underline{\hspace{1cm}} \\ &= \underline{\hspace{1cm}} \text{ m}\end{aligned}$$

**5.**



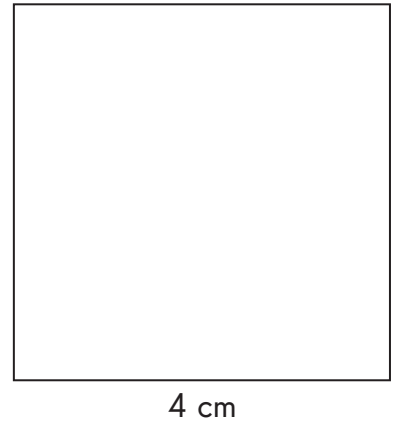
$$\begin{aligned}\text{Perimeter} &= \underline{\hspace{1cm}} + \underline{\hspace{1cm}} + \underline{\hspace{1cm}} + \underline{\hspace{1cm}} + \underline{\hspace{1cm}} + \underline{\hspace{1cm}} \\ &= \underline{\hspace{1cm}} \text{ ft}\end{aligned}$$

Name: \_\_\_\_\_

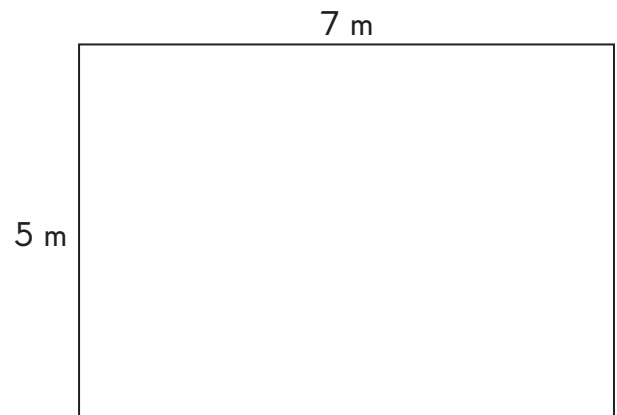
Date: \_\_\_\_\_

**Solve.**

- 6.** Sharon has a square piece of paper that has a side length of 4 centimeters. What is the perimeter of the piece of paper?



- 7.** Jeff puts a fence around a rectangular garden that measures 5 meters by 7 meters. How many meters of fencing does Jeff use?



**Name:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Solve.**

- 8.** Mavis pastes ribbon around the rectangular box twice.  
The box measures 5 centimeters by 9 centimeters.  
What is the length of the ribbon that Mavis uses?

