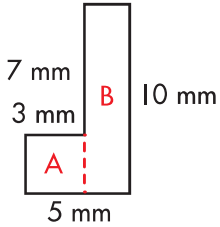


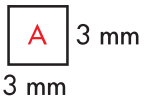
Lesson 6.3 Calculating Area: Other Polygons

To find the area of an irregular shape, separate the shape into its component figures and find the area of each one.

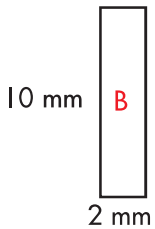


This figure can be divided into two rectangles, as shown by the dotted line.

To find the missing side measurement of shape A, look at the vertical measurements you already know: 10 mm and 7 mm. Because the missing side must be the difference between 10 and 7, subtract to get the answer: $10 - 7 = 3$ mm.



To find the area of shape A, multiply $l \times w$.
 $3 \times 3 = 9$ mm



Follow the same steps to find the area of shape B.

$$5 - 3 = 2 \text{ mm}$$

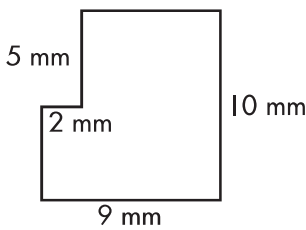
$$A = 10 \times 2 = 20 \text{ mm}$$

Then, add the two areas together to get the area of the entire irregular shape.
 $9 + 20 = 29$ square mm

Find the area of each figure.

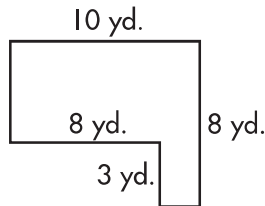
a

1.



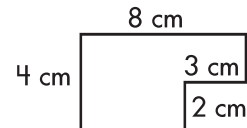
$A = \underline{\hspace{2cm}}$ sq. mm

b



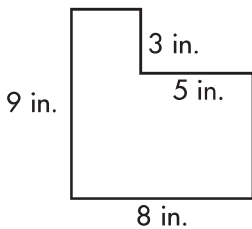
$A = \underline{\hspace{2cm}}$ sq. yd.

c

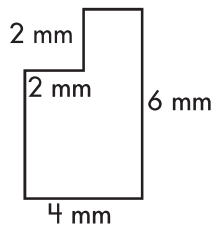


$A = \underline{\hspace{2cm}}$ sq. cm

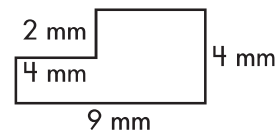
2.



$A = \underline{\hspace{2cm}}$ sq. in.



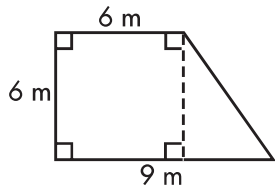
$A = \underline{\hspace{2cm}}$ sq. mm



$A = \underline{\hspace{2cm}}$ sq. mm

Lesson 6.3 Calculating Area: Other Polygons

Some irregular shapes are made up of more than one type of figure.



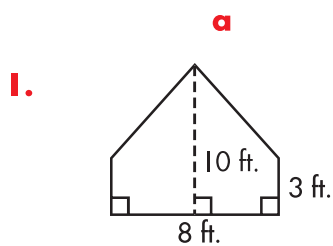
This figure can be divided into a square and a triangle.

area of square
 $A = 6 \times 6 = 36$

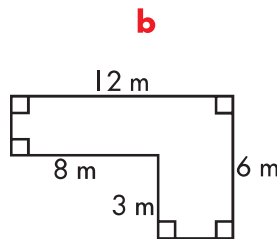
area of triangle
 $A = \frac{1}{2} \times 3 \times 6 = 9$

The area of the figure is $36 + 9 = 45$ square meters.

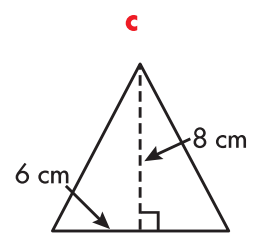
Find the area of each figure.



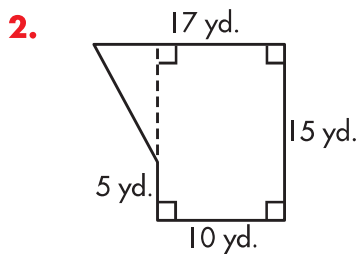
$A = \underline{\hspace{2cm}}$ sq. ft.



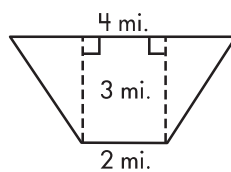
$A = \underline{\hspace{2cm}}$ sq. m



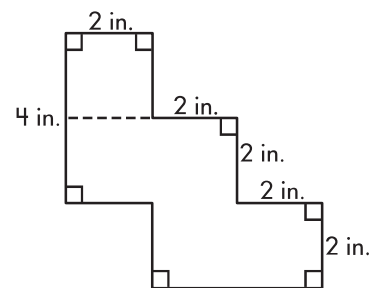
$A = \underline{\hspace{2cm}}$ sq. cm



$A = \underline{\hspace{2cm}}$ sq. yd.



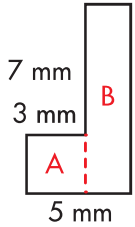
$A = \underline{\hspace{2cm}}$ sq. mi.



$A = \underline{\hspace{2cm}}$ sq. in.

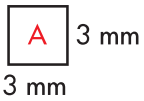
Lesson 6.3 Calculating Area: Other Polygons

To find the area of an irregular shape, separate the shape into its component figures and find the area of each one.

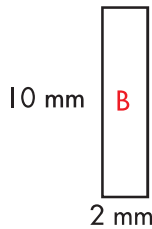


This figure can be divided into two rectangles, as shown by the dotted line.

To find the missing side measurement of shape A, look at the vertical measurements you already know: 10 mm and 7 mm. Because the missing side must be the difference between 10 and 7, subtract to get the answer: $10 - 7 = 3$ mm.



To find the area of shape A, multiply $l \times w$.
 $3 \times 3 = 9$ mm



Follow the same steps to find the area of shape B.

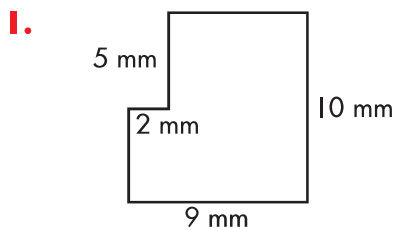
$$5 - 3 = 2 \text{ mm}$$

$$A = 10 \times 2 = 20 \text{ mm}$$

Then, add the two areas together to get the area of the entire irregular shape.
 $9 + 20 = 29$ square mm

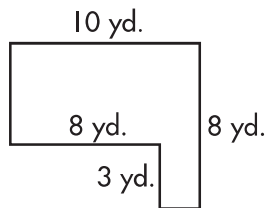
Find the area of each figure.

a



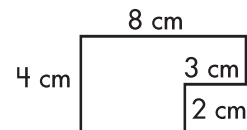
$$A = \underline{80} \text{ sq. mm}$$

b



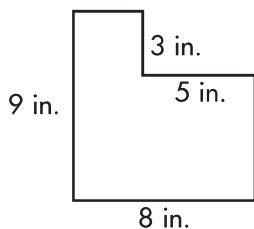
$$A = \underline{56} \text{ sq. yd.}$$

c

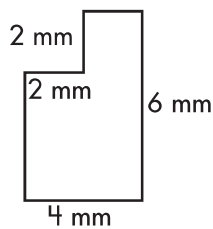


$$A = \underline{26} \text{ sq. cm}$$

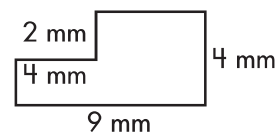
2.



$$A = \underline{57} \text{ sq. in.}$$



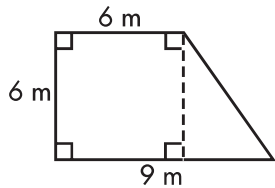
$$A = \underline{20} \text{ sq. mm}$$



$$A = \underline{28} \text{ sq. mm}$$

Lesson 6.3 Calculating Area: Other Polygons

Some irregular shapes are made up of more than one type of figure.



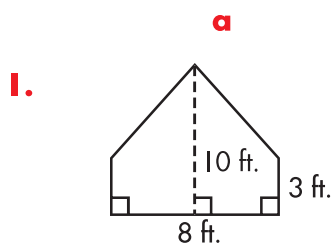
This figure can be divided into a square and a triangle.

area of square
 $A = 6 \times 6 = 36$

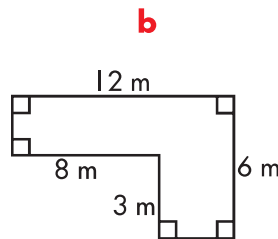
area of triangle
 $A = \frac{1}{2} \times 3 \times 6 = 9$

The area of the figure is $36 + 9 = 45$ square meters.

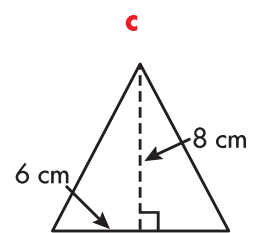
Find the area of each figure.



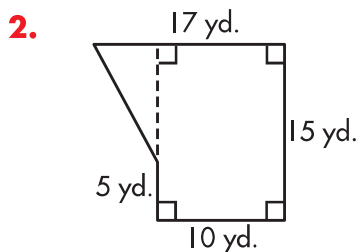
$A = \underline{52}$ sq. ft.



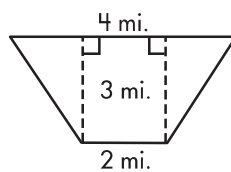
$A = \underline{48}$ sq. m



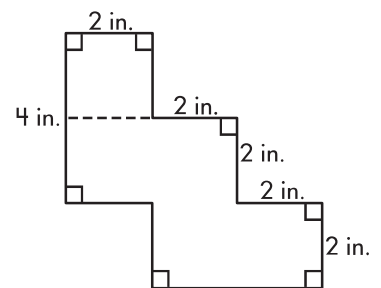
$A = \underline{48 \text{ or } 24}$ sq. cm



$A = \underline{185}$ sq. yd.



$A = \underline{9}$ sq. mi.



$A = \underline{20}$ sq. in.