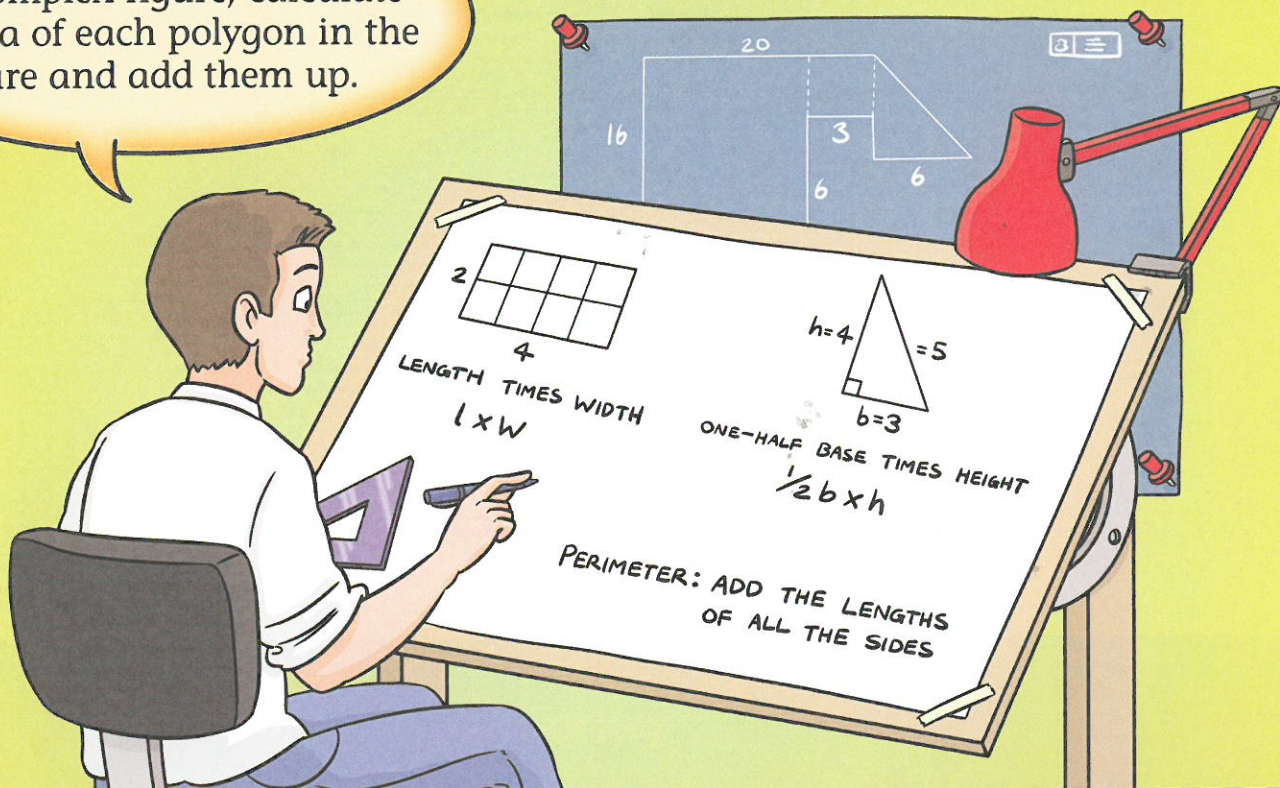


Complex Figures

Skill: Find perimeters and areas of complex figures

To find the area of a complex figure, calculate the area of each polygon in the figure and add them up.



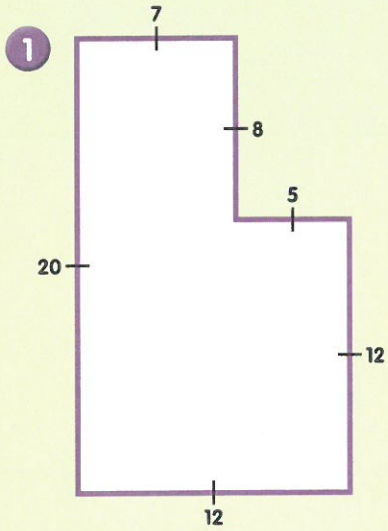
- 1** Lay out the mats and the cards.
- 2** Look at each figure on the mats and compute the perimeter and the area.
- 3** Find the cards that show the answers.
- 4** Place each answer card in the correct square next to the figure.
- 5** Complete the written practice activity.

Complex Figures

Complex Figures mats showing figures and answer cards:

- Figure 1: Area = 64 square units
- Figure 2: Area = 200 square units
- Figure 3: Area = 156 square units
- Figure 4: Area = 325 square units
- Figure 5: Area = 1,600 square units
- Figure 6: Area = 8,025 square units
- Figure 7: Area = 108 square units
- Figure 8: Area = 304 square units

Complex Figures

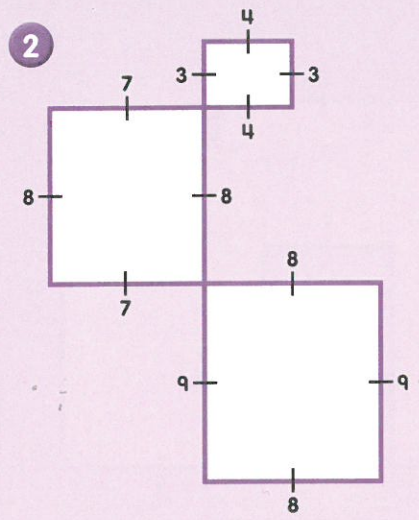


perimeter

units

area

square units

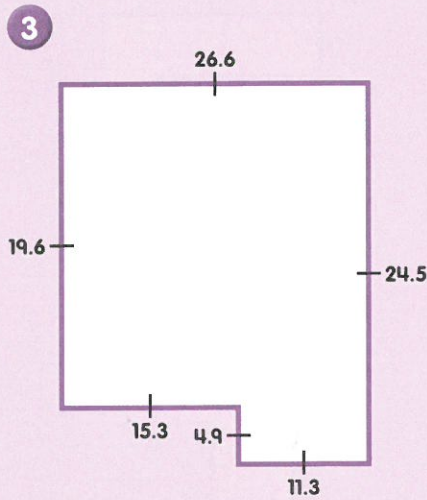


perimeter

units

area

square units

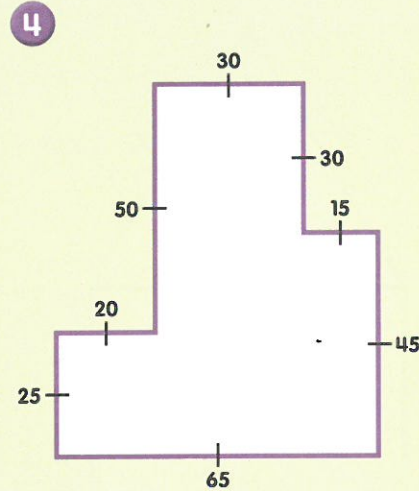


perimeter

units

area

square units

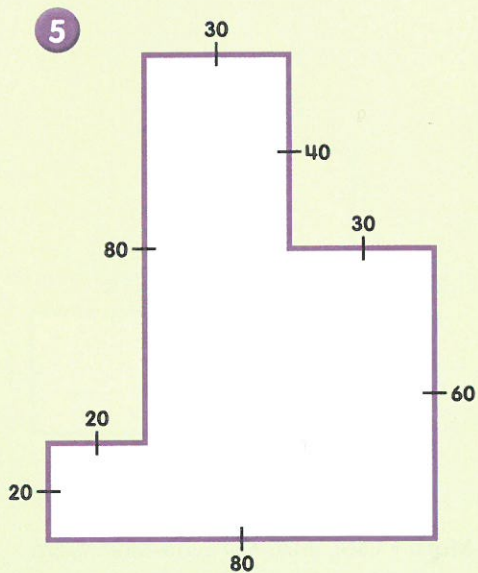


perimeter

units

area

square units

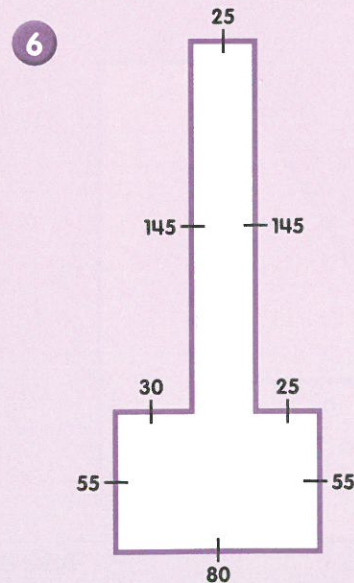


perimeter

units

area

square units



perimeter

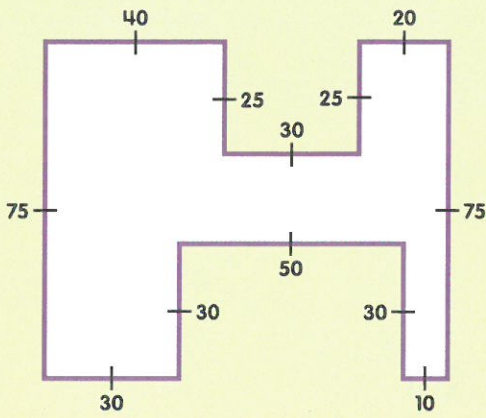
units

area

square units

Complex Figures

7



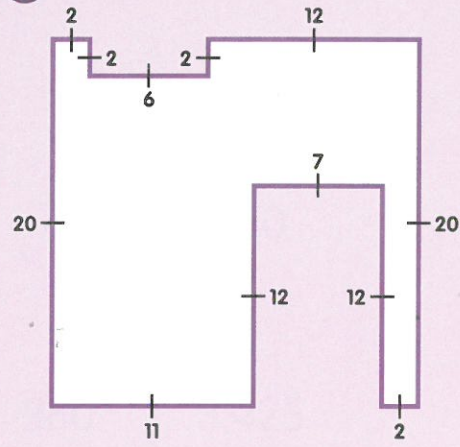
perimeter

units

area

square units

8



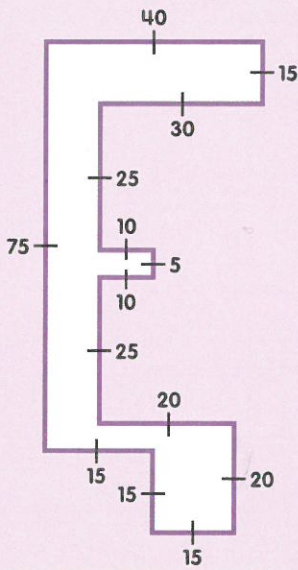
perimeter

units

area

square units

9



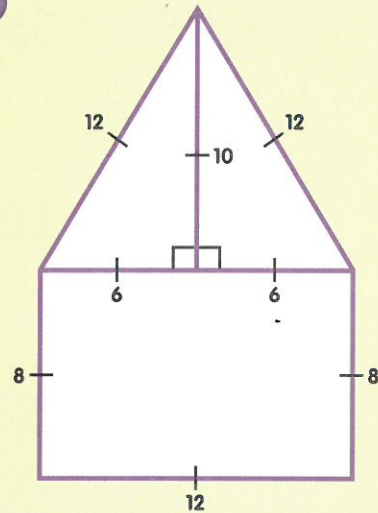
perimeter

units

area

square units

10



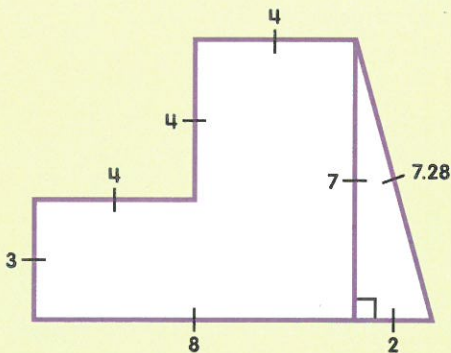
perimeter

units

area

square units

11



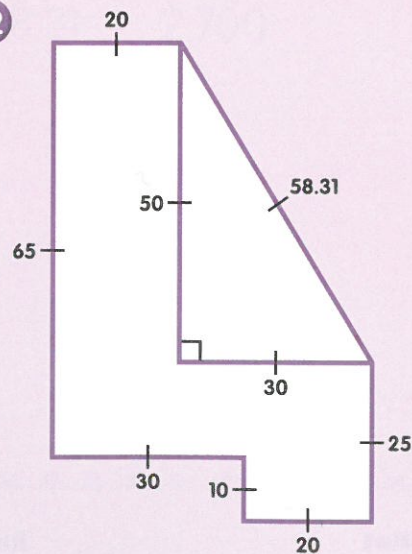
perimeter

units

area

square units

12




perimeter

units

area

square units



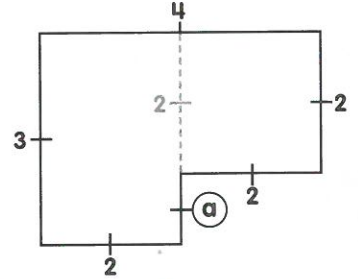
64	200	78	140
102.2	576.73	280	3,425
360	5,200	560	8,025
440	4,500	108	304
320	1,575	52	156
32.28	47	228.31	2,700

Complex Figures

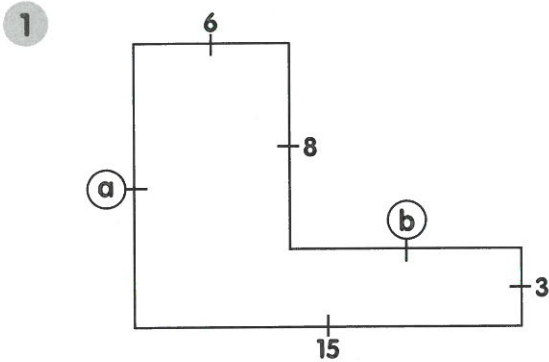
To find the length of a missing side on a complex figure, divide the figure into polygons and then use the known information to determine the missing information.

A square has four equal sides, so the dashed line in this figure = 2.

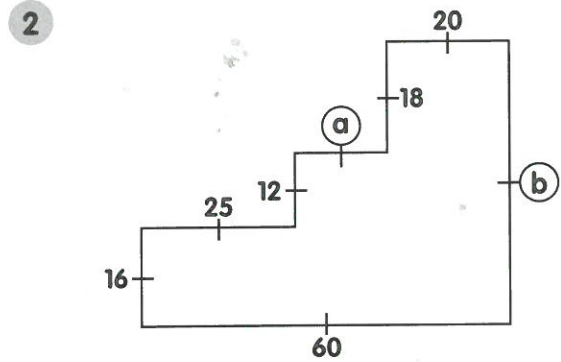
The opposite sides of a rectangle are equal, so $a = 3 - 2$
 $a = 1$.



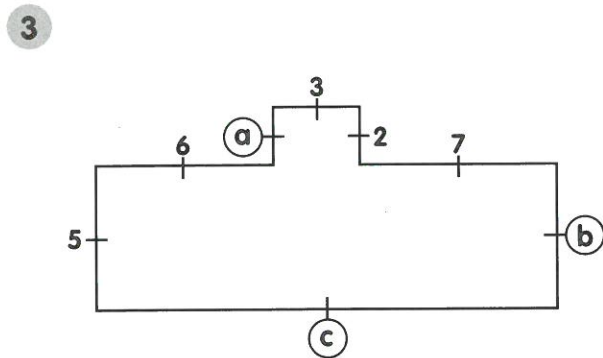
Find the lengths of the missing sides and calculate the perimeter and the area for each figure.



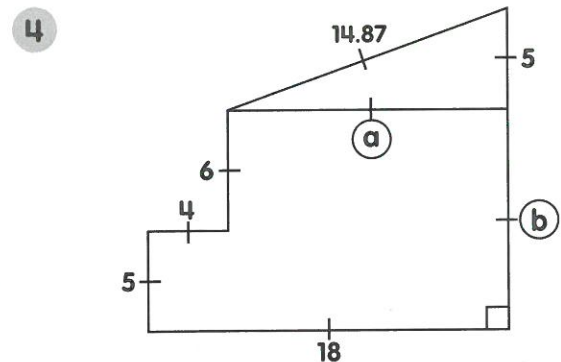
$a = \underline{\hspace{2cm}}$ $b = \underline{\hspace{2cm}}$
 perimeter = $\underline{\hspace{2cm}}$ units
 area = $\underline{\hspace{2cm}}$ square units



$a = \underline{\hspace{2cm}}$ $b = \underline{\hspace{2cm}}$
 perimeter = $\underline{\hspace{2cm}}$ units
 area = $\underline{\hspace{2cm}}$ square units



$a = \underline{\hspace{2cm}}$ $b = \underline{\hspace{2cm}}$ $c = \underline{\hspace{2cm}}$
 perimeter = $\underline{\hspace{2cm}}$ units
 area = $\underline{\hspace{2cm}}$ square units



$a = \underline{\hspace{2cm}}$ $b = \underline{\hspace{2cm}}$
 perimeter = $\underline{\hspace{2cm}}$ units
 area = $\underline{\hspace{2cm}}$ square units