

# Lesson 3 Reteach

## Area of Composite Figures

To find the area of a composite figure, decompose the figure into shapes whose areas you know how to find. Then find the sum of these areas.

### Example

Find the area of the composite figure.

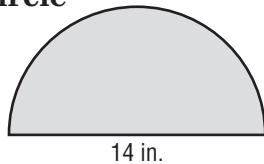
The figure can be separated into a semicircle and trapezoid.

#### Area of semicircle

$$A = \frac{1}{2} \pi r^2$$

$$A = \frac{1}{2} \cdot \pi \cdot (7)^2$$

$$A \approx 77.0$$

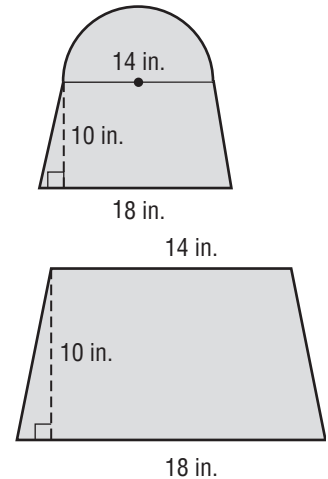


#### Area of trapezoid

$$A = \frac{1}{2} h(b_1 + b_2)$$

$$A = \frac{1}{2} \cdot 10 \cdot (14 + 18)$$

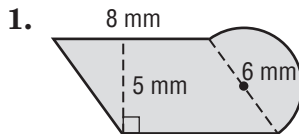
$$A = 160$$



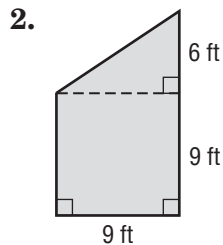
The area of the figure is about  $77.0 + 160$  or 237 square inches.

### Exercises

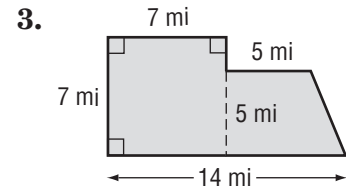
Find the area of each figure. Round to the nearest tenth if necessary.



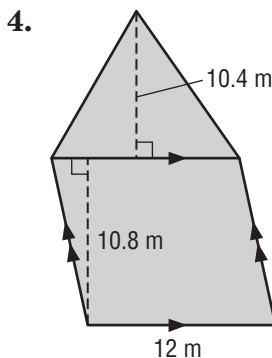
54.1 mm squared



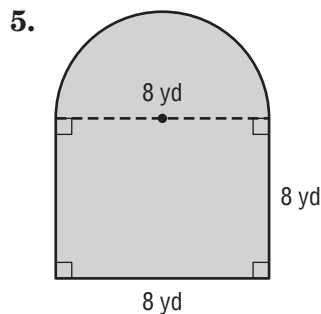
108 ft squared



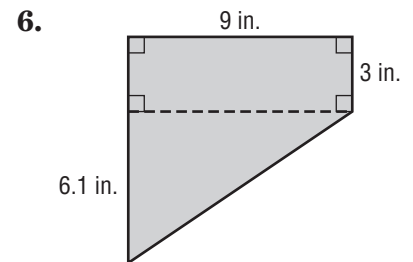
79 mi squared



192 m squared



89.1 yd squared



54.5 in squared