NAME _____ DATE _____ PERIOD _____

Lesson 3 Reteach

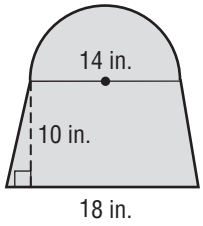
Area of Composite Figures

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.

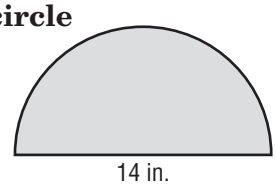


Area of semicircle

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

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

$A \approx 77.0$

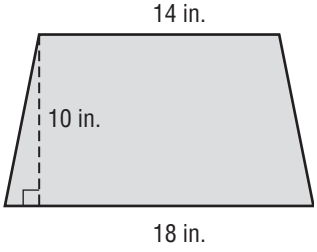


Area of trapezoid

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

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

$A = 160$

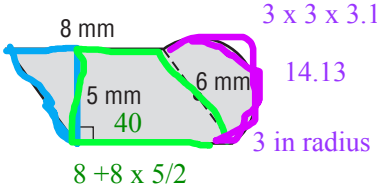


The area of the figure is about 77.0 + 160 or 237 square inches.

Exercises

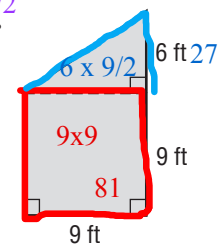
Find the area of each figure. Round to the nearest tenth if necessary.

1.



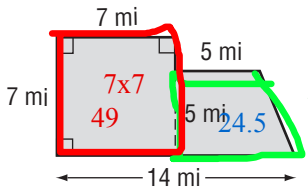
54.13 sq mm

2.



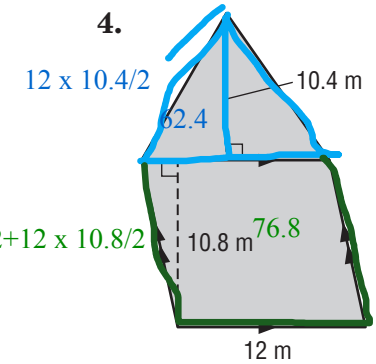
108 sq ft

3.



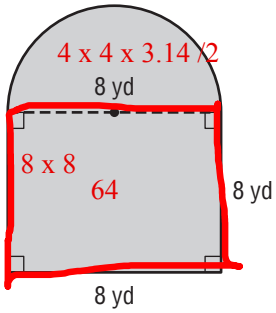
73.5 sq mi

4.



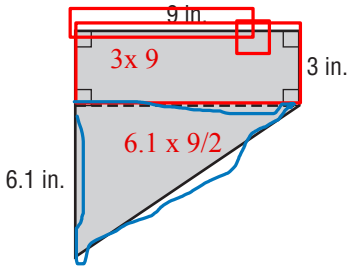
139.2 sq m

5.



89.12 sq yd

6.



27.45

base + base x height / 2