Area of Trapezoids

COMMON CORE STANDARD—6.G.1 Solve real-world and mathematical problems

involving area, surface area, and volume.

Find the area of the trapezoid.

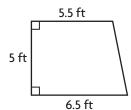
1.
$$A = \frac{1}{2}(b_1 + b_2)h$$

 $A = \frac{1}{2} + (\underline{11} + \underline{17}) \times 18$
 $A = \frac{1}{2} \times \underline{28} \times 18$

A = 252 cm²

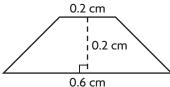
11 cm

2.



$$A = \underline{\hspace{1cm}}$$

3.

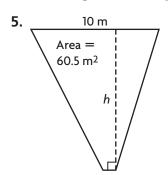


$$A =$$

5 in.

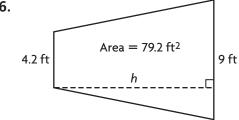
$$A = \underline{\hspace{1cm}}$$

Find the height of the trapezoid.



$$h =$$

6.



$$h =$$

Problem Solving

- 7. Sonia makes a wooden frame around a square picture. The frame is made of 4 congruent trapezoids. The shorter base is 9 in., the longer base is 12 in., and the height is 1.5 in. What is the area of the picture frame?
- 8. Bryan cuts a piece of cardboard in the shape of a trapezoid. The area of the cutout is 43.5 square centimeters. If the bases are 6 centimeters and 8.5 centimeters long, what is the height of the trapezoid?