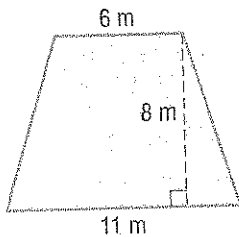


# Area of Trapezoids

## Guided Practice

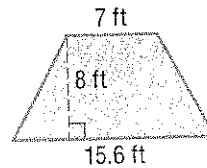
Find the area of each trapezoid. Round to the nearest tenth if necessary. (Examples 1 and 2)

1. \_\_\_\_\_



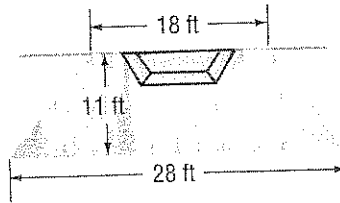
Show your work.

2. \_\_\_\_\_



3. A trapezoid has an area of 15 square feet. If the bases are 4 feet and 6 feet, what is the height of the trapezoid? (Example 3) \_\_\_\_\_

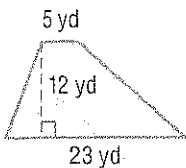
4. In the National Hockey League, goaltenders can play the puck behind the goal line only in a trapezoid-shaped area, as shown at the right. Find the



area of the trapezoid. (Example 4) \_\_\_\_\_

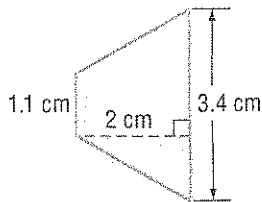
## Independent Practice

Find the area of each trapezoid. Round to the nearest tenth if necessary. (Examples 1 and 2)

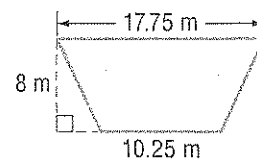


Show your work.

2. \_\_\_\_\_



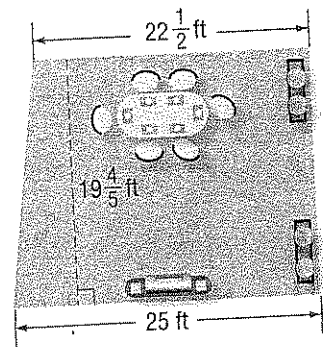
3. \_\_\_\_\_



4. A trapezoid has an area of 150 square meters. If the bases are 14 meters and 16 meters, what is the height of the trapezoid? (Example 3)

5. A trapezoid has an area of 400 square millimeters. The bases are 14 millimeters and 36 millimeters. What is the height of the trapezoid? (Example 3)

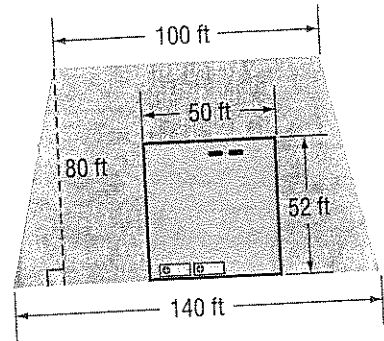
6. Find the area of the patio shown. (Example 4)



Use the diagram that shows the lawn that surrounds an office building.

a. What is the area of the lawn?

b. If one bag of grass seed covers 2,000 square feet, how many bags are needed to seed the lawn?



### Standardized Test Practice

13. Barrington cuts a piece of wood in the shape of a trapezoid. The height is 4 feet. The top is 3 feet across and the bottom is 10 feet across. Which equation could be used to find the area of the piece of wood?

- (A)  $10 = \frac{1}{2} \times h(4 + 3)$
- (B)  $A = \frac{1}{2} \times 10(4 + 3)$
- (C)  $A = \frac{1}{2} \times 3(4 + 10)$
- (D)  $A = \frac{1}{2} \times 4(3 + 10)$

17. A trapezoid has an area of 50 square inches. The bases are 3 inches and 7 inches. What is the height of the trapezoid?

18. A trapezoid has an area of 18 square miles. The bases are 5 miles and 7 miles. What is the height of the trapezoid?

19. A county is shaped like a trapezoid. Its northern border is about 9.6 miles across, and the southern border is approximately 25 miles across. The distance from the southern border to the northern border is about 90 miles. Find the approximate area of the county.