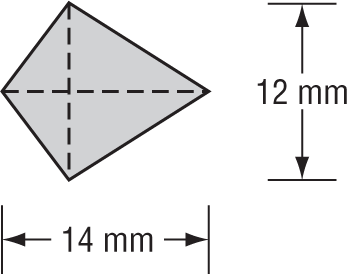
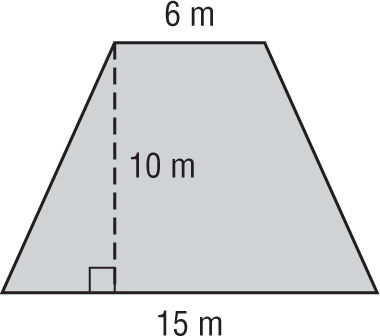
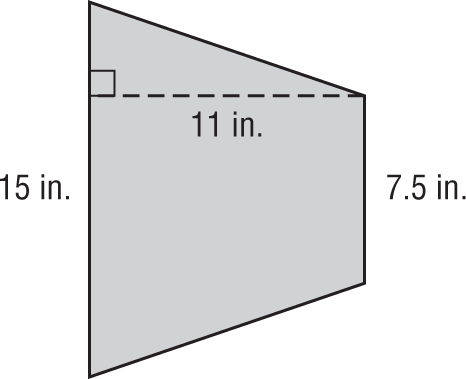
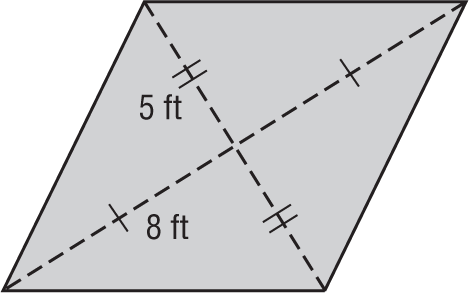
**11-2 Skills Practice**

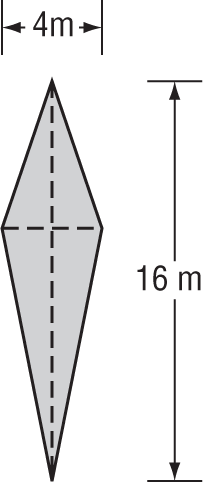
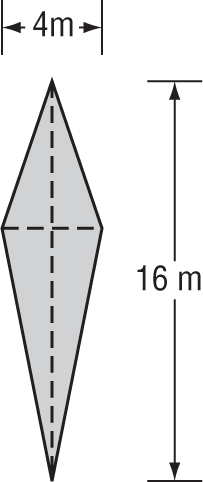
***Areas of Trapezoids, Rhombi, and Kites***

**Find the area of each trapezoid, rhombus, or kite.**

** 1. 2.**

** 3. 4.**

****

** 5. 6.**

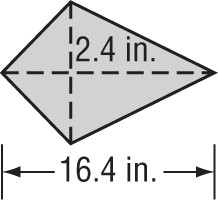
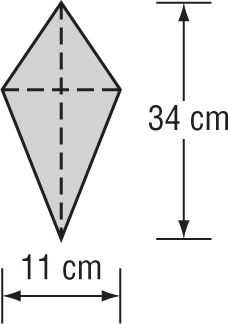
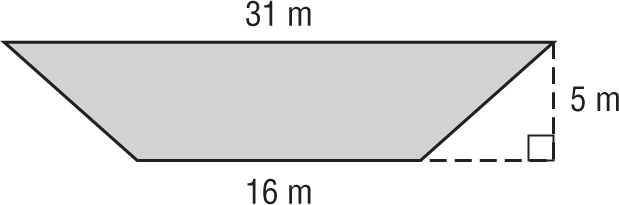
**ALGEBRA Find each missing length.**

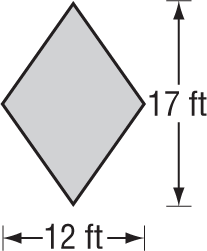
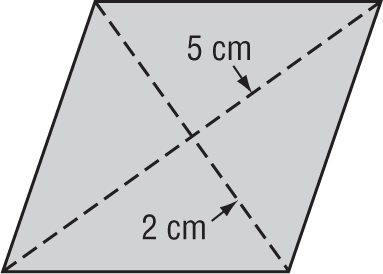
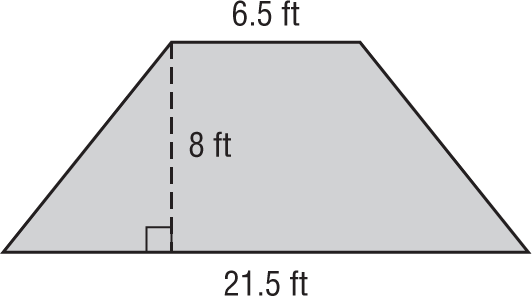
**7.** A trapezoid has base lengths of 6 and 15 centimeters with an area of 136.5 square centimeters.   
What is the height of the trapezoid?

**8.** One diagonal of a kite is four times as long as the other diagonal. If the area of the kite is 72 square meters,   
what are the lengths of the diagonals?

**9.** A trapezoid has a height of 24 meters, a base of 4 meters, and an area of 264 square meters.   
What is the length of the other base?

**Find the area of each trapezoid, rhombus, or kite.**

** 10. 11. 12.**

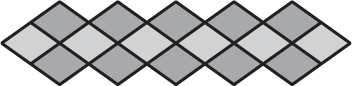
** 13. 14. 15.**

**ALGEBRA Find each missing length.**

**16.** A trapezoid has base lengths of 19.5 and 24.5 centimeters with an area of 154 cm2.   
What is the height of the trapezoid?

**17.** One diagonal of a kite is twice as long as the other diagonal. If the area of the kite is 400 square meters,   
what are the lengths of the diagonals?

**18.** A trapezoid has a height of 40 inches, a base of 15 inches, and an area of 2400 square inches.   
What is the length of the other base?

**19. DESIGN** Mr. Hagarty used 16 congruent rhombi-shaped tiles to design the midsection of the backsplash area above a kitchen sink. The length of the design is 27 inches and the total area is 108 square inches.

**a.** Find the area of one rhombus.

**b.** Find the length of each diagonal.