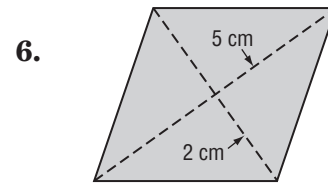
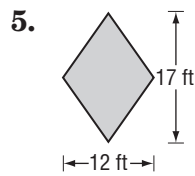
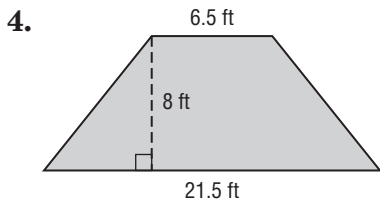
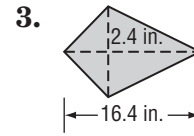
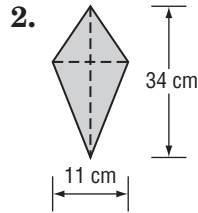
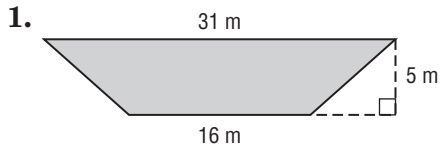


11-2 Practice

Areas of Trapezoids, Rhombi, and Kites

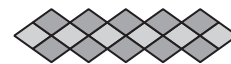
Find the area of each trapezoid, rhombus, or kite.



ALGEBRA Find each missing length.

7. A trapezoid has base lengths of 19.5 and 24.5 centimeters with an area of 154 cm^2 . What is the height of the trapezoid?
8. 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?
9. 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?

10. **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.