# Key Concept and Vocabulary

Rectangle:  $A = \ell w$ 

Parallelogram: A = bh

 $A = \frac{1}{2}bh$ Triangle:

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



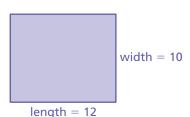
#### Visual Model

Area of a Rectangle:

$$A = \ell w$$

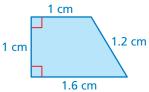
$$= 12(10)$$

= 120 square units



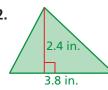
#### **Skill Examples**

1.



$$A = \frac{1}{2}(1.6 + 1)(1)$$
$$= 1.3 \text{ cm}^2$$

2.

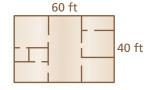


$$A = \frac{1}{2}(3.8)(2.4)$$
$$= 4.56 \text{ in.}^2$$

### **Application Example**

3. Find the area of the rectangular apartment floor.

$$A = 60 \cdot 40$$
  
= 2400



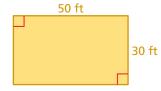
The area of the floor is 2400 square feet.

## PRACTICE MAKES PURR-FECT

Check your answers at BigIdeasMath.com. -

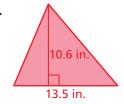
Find the area of the figure.

4.



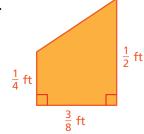
 $Area = _{-}$ 

5.



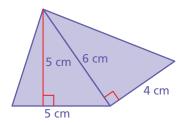
Area =

6.

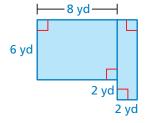


Area =

7.

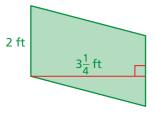


8.



Area =

9.



Area = \_\_\_\_\_

- **10. CARPET** You are carpeting a rectangular room that is 3.5 yards wide and 4.5 yards long. The carpet costs \$15 per square yard. How much will it cost to carpet the room?
- 11. COLORADO Colorado is approximately a rectangle that is 280 miles wide and 380 miles long. Is the area of Colorado greater than or less than 100,000 square miles? Explain.