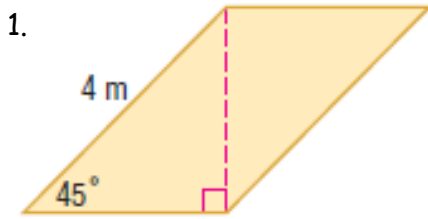


## Area of Parallelograms

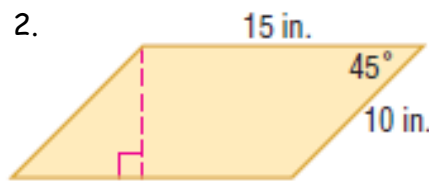
### Worksheet

For #1-3, find the area and perimeter of each parallelogram. Round to the nearest tenth if necessary.



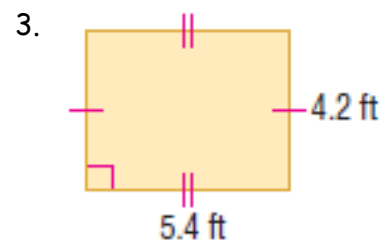
Area: \_\_\_\_\_

Perimeter: \_\_\_\_\_



Area: \_\_\_\_\_

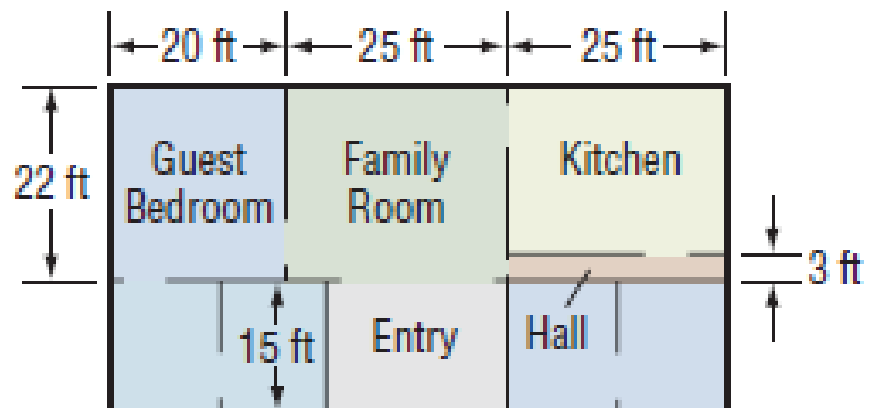
Perimeter: \_\_\_\_\_



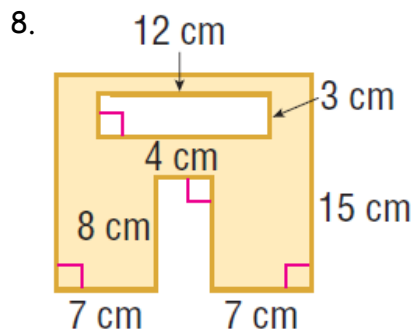
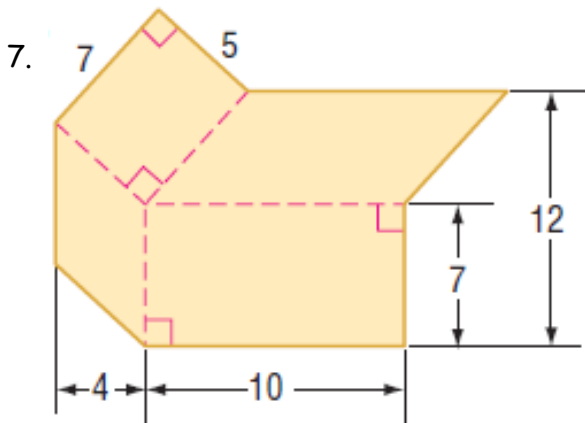
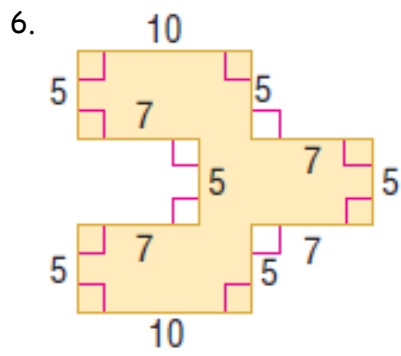
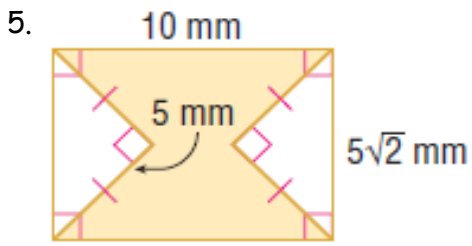
Area: \_\_\_\_\_

Perimeter: \_\_\_\_\_

4. The Dodsons are planning to have new carpet installed in their guest bedroom, family room, and hallway. Find the number of square yards of carpet they should order if all rooms are rectangular. (1 yard = 3 feet)



For # 5-8, find the area of each shaded region. Round to the nearest tenth if necessary.



9. Given a parallelogram of base  $b$  and height  $h$ , determine an expression for the area of a parallelogram with each dimension cut in half. Determine the formulas for the area and perimeter. Compare them to the original formulas. Make a conjecture about the area and perimeter of a parallelogram in which each dimension is divided in half.

Original Parallelogram:

Area \_\_\_\_\_

Perimeter \_\_\_\_\_

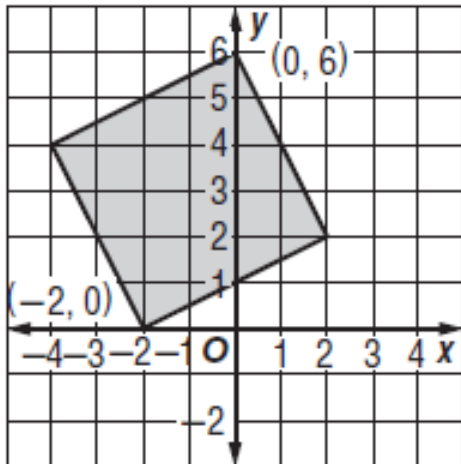
New Parallelogram:

Area \_\_\_\_\_

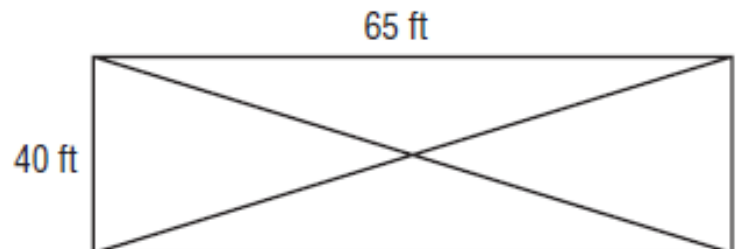
Perimeter \_\_\_\_\_

Conjecture:

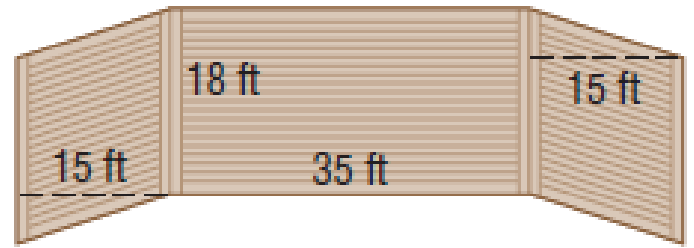
10. What is the area of the square?



11. Tia is going to spray paint a rectangle and its two diagonals on a field for a game. If each can of spray paint covers approximately 100 feet, how many cans of spray paint should Tia buy?



12. Coach Kauffman is planning to stain his deck. In order to know how much stain to buy, he needs to find the area of the deck, which is composed of a rectangle and two parallelograms and is shown below. What is the area of the deck? Show all work.



13. A crosswalk with two stripes, each 52 feet long, is at a  $60^\circ$  angle to the curb. The width of the crosswalk at the curb is 16 feet. Find the perpendicular distance between the stripes of the crosswalk.

