

Karl and Aimee are building a playhouse for their little sister. The floor of the playhouse will be a rectangle that is 6 feet by $8\frac{1}{2}$ feet.

- How much carpeting will Karl and Aimee need to cover the floor?
- How much molding will they need around the edges of the floor to hold the carpet in place?
- The walls will be 6 feet high. A pint of paint covers about 50 square feet. How much paint will they need to paint the inside walls?
- Suppose carpet cost \$15 per square yard. What will be the cost of the carpet?
- Suppose the molding is \$1.25 per foot. How much will the molding cost?
- Draw a scale drawing of the floor so that $\frac{1}{2}$ inch represents 1 foot.

The Nevins' living room floor is a square 20 feet by 20 feet. It is covered with wood. They have carpeted a quarter-circle region as shown.

- What is the area of the uncovered wood, to the nearest square foot?
- A 1-quart can of floor wax covers 125 square feet of wood flooring. How many cans of floor wax are needed to wax the uncovered wood?
- A special finishing trim was placed along the curved edge of the carpet. How much trim, to the nearest tenth of a foot, was needed?

