**Simplify each expression**

**1.** $\sqrt{49}$ + 10 **2.** 30 − $\sqrt{16}$ **3.** $\sqrt{150-29}$ **4.** $\frac{\sqrt{225}}{5}$ **5.** 3$\sqrt{196}$

**Square roots are commonly used in different professions. Here are some examples:**

 ***Home decorating:*** A remnant of carpet in the shape of a square is advertised as 16 square yards. That will cover an area that measures 4 yards by 4 yards.

 ***Law enforcement:*** In order to find the speed of a car after a collision, an investigator can measure the length of the skid marks (L) and apply the formula: speed = 2$\sqrt{5L}$

***Computer programming:*** Square root and absolute value functions are often used in computer programming to ensure a positive number is used for calculations.

**Solve the following problems involving square roots:**

 **1.** What is the length of a square tablecloth that has an area of 3600 square centimeters?

 **2.** A square chessboard has an area of 144 square inches. How long is each side of the board?

 **3.** Your bedroom is a perfect square. If you had to order 225 square feet of carpet to cover the floor, how long is each side of your bedroom?