Solve each problem using the counting principle.

A store has 15 sofas, 12 lamps, and 10 tables at half price. How many different combinations of a sofa, a lamp, and a table can be sold at half price?

$$15 \cdot 12 \cdot 10 = \boxed{1800}$$

Solve each problem using the counting principle.

How many ways can six different books be arranged on a shelf?

$$6 \cdot 5 \cdot 4 \cdot 3 \cdot 2 \cdot 1 = \boxed{720}$$

Solve each problem using the counting principle.

How many 2-digit numbers can be formed from the digits 1, 2, 3, 4, & 5 if repetitions are allowed?

$$\underset{\text{digit 1}}{5} \cdot \underset{\text{digit 2}}{5} = \boxed{25}$$

How many different ways can the letters of the word PEOPLE be arranged?

6 letters

$$6 \cdot 5 \cdot 4 \cdot 3 \cdot 2 \cdot 1 = \frac{720}{2} = \frac{360}{2}$$

$$= \boxed{180}$$