6.3 Finding Perimeters

**Learning Objectives:**
1. Use formulas to find perimeter of a rectangle, square, triangle, and other polygons.
2. Use formulas to find circumference.

1. **Use formulas to find perimeter of a rectangle, square, triangle, and other polygons**

**Definitions:**
1. **Perimeter**—is the distance around the outside edge.
2. **Units for perimeter**—meter, yard, feet, centimeter, inch . . .
3. **Perimeter of a Polygon**—is the distance around a flat shape.

**Example 1.** Find the perimeter of the polygon.

![Polygon with sides labeled 7 yd, 12 yd, 5 yd, 2 yd, and 8 yd.]

**Example 2.** A rectangular field measures 41 feet by 18 feet. Find the cost of constructing a fence if fencing costs $19.50 per foot.

2. **Use formulas to find circumference**

**Definitions:**
- **Circle:**
  - **Diameter of a circle:**
  - **Radius of a circle:**
  - **Circumference of a circle:**

**Example 3.** A circular room has a radius of 10.3 feet. Find the distance around the room. Leave the answer in terms of $\pi$ and do not forget the units.