Characteristics of a Circle

- Round
- Never-ending
- Ring
- Collection of infinite points
- Polygon with an infinite number of sides
- Any point on the circle is the same distance from the center
- Made up of a closed curved line
Vocabulary

Center: Equidistant from all points on the circle.

Diameter: A line segment drawn from any point on the circle through the center to another point on the circle.

Radius: A line segment drawn from the center of the circle to any point on the circle.
Example Problems

1. The radius of the moon is 1,050 miles. What is the circumference?

2. If the diameter of the sun is 1,500,000 miles, find the circumference.

3. Find the circumference of a circular company symbol that has a diameter of 5 feet.

4. A motorcycle wheel has a spoke that measures 12 inches. What is the circumference of the wheel?

5. A quarter has a diameter of 1 inch. What is the circumference?
Answers to Example Problems

1. 6,594 miles
2. 4,710,000 miles
3. 15.7 feet
4. 75.36 inches
5. 3.14 inches
Formulas

Formulas for circumference: $2\pi r$ or $\pi d$