



## Circle Area and Circumference

### Today's Standard

7.G.B4 - Know the formulas for the area and circumference of a circle and use them to solve problems; give an informal derivation of the relationship between the circumference and area of a circle.

Cues	Notes
Area	Area of a circle is the space inside the circle.
Circumference	Circumference is the distance around the circle.
Radius	Radius is the distance from the center of the circle to any point on its edge.
Diameter	Diameter is twice the radius, or the distance across the circle through the center.
Pi ( $\pi$ )	Pi ( $\pi$ ) is approximately 3.14 and is a constant used in circle calculations.
Formulas	Area formula: $\pi r^2$
Applications	Circumference formula: $2\pi r$  Real-world applications include designing circular objects, calculating material needs, and solving practical problems.

### Summary

Understanding the formulas for the area and circumference of a circle is essential for solving geometric problems and real-world applications. Mastery of these concepts builds a foundation for more advanced mathematical topics.