

# Math 6+: Geometry

## Circles

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**Students**                      **Learning Continuum Statements:**

**Students:**

**RIT 231-240:**

- Uses the 45-45-90 and 30-60-90 right triangle relationships to calculate the length of a missing side of a right triangle
- Uses the 45-45-90 and 30-60-90 right triangle relationships to solve real-world and mathematical problems

**Students:**

**RIT 241-250:**

- Solves problems involving inscribed angles on a diameter
- Understands that the ratio between the circumference and the diameter of a circle is equal to  $\pi$
- Uses properties of central and inscribed angles to solve problems involving circles

**Students:**

**RIT 251-260:**

- Calculates the area of sectors given the measure of the central angle
- Solves problems involving inscribed angles on a diameter
- Understands that the ratio between the circumference and the diameter of a circle is equal to  $\pi$
- Uses properties of central and inscribed angles to solve problems involving circles
- Uses properties of chords to solve problems involving circles

**Students:**

**RIT 261-270:**

- Calculates arc lengths
- Calculates the area of a circle given the measure of the central angle and the area of a sector
- Calculates the area of sectors given the measure of the central angle
- Calculates the central angle of a sector given the area of the sector
- Recognizes a precise definition of circles
- Solves problems involving arc measures of a circle
- Solves problems involving inscribed angles on a diameter
- Understands that the ratio between the circumference and the diameter of a circle is equal to  $\pi$
- Uses properties of central and inscribed angles to solve problems involving circles
- Uses properties of chords to solve problems involving circles

**Students:**

**RIT 271-280:**

- Calculates arc lengths
- Calculates the area of sectors given the measure of the central angle
- Solves problems involving inscribed angles on a diameter
- Uses properties of central and inscribed angles to solve problems involving circles
- Uses properties of chords to solve problems involving circles

**Students:**

**RIT 281-290:**

- Uses properties of central and inscribed angles to solve problems involving circles

**Students:**

**RIT 291-300:**

- Solves problems involving angles formed by chords and secants that intersect at a point inside the circle, other than at the center
- Solves problems involving angles formed by tangents and secants that intersect at a point outside the circle