

## Common Core Standards - Resource Page

The resources below have been created to assist teachers' understanding and to aid instruction of this standard.

Domain	Standard: G.C.1 - Prove that all circles are similar.
<p><b><u>Circles</u></b> <b>Understand and apply theorems about circles</b></p>	<p><u>Questions to Focus Learning</u> What does it mean for two figures to be similar? Why are all circles similar?</p> <p>All circles are similar.</p> <p><u>Student Friendly Objectives</u></p> <p><i>Knowledge Targets</i></p> <p>I know the definition of similar figures. I know the properties of dilations. I know the definition of transformations. I know the definition of isometric transformations and rigid motions. I know the properties of isometric transformations and rigid motions.</p> <p><i>Reasoning Targets</i></p> <p>I can prove all circles are similar by applying my knowledge of dilations and isometric transformations.</p> <p><u>Vocabulary</u></p> <p>circle dilations rigid motions similar similarity transformations transformations</p> <p><u>Teacher Tips</u></p>

Vertical Progression

G.C.2 - Identify and describe relationships among inscribed angles, radii, and chords. Include the relationship between central, inscribed, and circumscribed angles; inscribed angles on a diameter are right angles; the radius of a circle is perpendicular to the tangent where the radius intersects the circle.

G.C.3 - Construct the inscribed and circumscribed circles of a triangle, and prove properties of angles for a quadrilateral inscribed in a circle.

G.C.5 - Derive using similarity the fact that the length of the arc intercepted by an angle is proportional to the radius, and define the radian measure of the angle as the constant of proportionality; derive the formula for the area of a sector.

The above information and more can be accessed for free on the [Wiki-Teacher](#) website.

Direct link for this standard: [G.C.1](#)