

Unit 8: Circles

CCSS	4 – Mastery	3 – Proficient	2 - Basic	1 – Below Basic	0 – No Evidence
Relationships in circles (G.C.2)	Can extend thinking beyond the standard, including tasks that may involve one of the following: <ul style="list-style-type: none"> <li>• Designing</li> <li>• Connecting</li> <li>• Synthesizing</li> <li>• Applying</li> </ul>	Describe and use the relationship to calculate values for <b>all of the following</b> : <ul style="list-style-type: none"> <li>• central angle</li> <li>• inscribed angle</li> <li>• circumscribed angles</li> <li>• inscribed angles on a diameter</li> <li>• angle formed by the radius of a circle and a tangent</li> </ul>	<b>Describe</b> and use the relationship to calculate values for 4 of the following: <ul style="list-style-type: none"> <li>• central angle</li> <li>• inscribed angle</li> <li>• circumscribed angles</li> <li>• inscribed angles on a diameter</li> <li>• angle formed by the radius of a circle and a tangent</li> </ul>	Use the relationship to calculate values for <b>3 of the following</b> : <ul style="list-style-type: none"> <li>• central angle</li> <li>• inscribed angle</li> <li>• circumscribed angles</li> <li>• inscribed angles on a diameter</li> <li>• angle formed by the radius of a circle and a tangent</li> </ul>	Little evidence of reasoning or application to solve the problem  Does not meet the criteria in a level 1
Inscribed and circumscribe polygons (G.C.3)	<ul style="list-style-type: none"> <li>• Justifying</li> <li>• Critiquing</li> <li>• Analyzing</li> <li>• Creating</li> <li>• Proving</li> </ul>	Construct <b>both</b> of the following: <ul style="list-style-type: none"> <li>• the inscribed circle of a triangle.</li> <li>• the circumscribed circle of a triangle</li> </ul>	Construct <b>one</b> of the following: <ul style="list-style-type: none"> <li>• the inscribed circle of a triangle.</li> <li>• the circumscribed circle of a triangle</li> </ul>	<b>Identify</b> the following: <ul style="list-style-type: none"> <li>• incenter is the intersection of the angle bisectors</li> <li>• circumcenter is the intersection perpendicular bisectors</li> </ul>	
Arch length and sector area (G.C.5)		<b>Define</b> the radian measure of the angle as the constant of proportionality  <b>Derive and explain the formula</b> for the area of a sector	<b>Calculate</b> a radian measure when given an arc length and its radius.  Given the area of a sector, <b>find the radius</b>	<b>Convert</b> degrees to radians using the constant of proportionality  <b>Find the area</b> of a sector	
Constructions (G.CO.12)		Use a variety of tools and methods to perform both of the following <b>with precision</b> : <ul style="list-style-type: none"> <li>• Construct perpendicular lines</li> <li>• Construct a line parallel to a given line through a point not on the line.</li> </ul>	Use a variety of tools and methods to perform <b>both</b> of the following: <ul style="list-style-type: none"> <li>• Construct perpendicular lines</li> <li>• Construct a line parallel to a given line through a point not on the line.</li> </ul>	Use a variety of tools and methods to perform <b>one</b> of the following: <ul style="list-style-type: none"> <li>• Construct perpendicular lines</li> <li>• Construct a line parallel to a given line through a point not on the line.</li> </ul>	
Constructions (G.CO.13)		Construct an inscribed regular hexagon <b>and</b> an inscribed square	Construct an <b>inscribed regular hexagon or an inscribed square</b>	Construct a square given a side	
Circle formula (G.GPE.1)		<b>Explain why</b> the Pythagorean Theorem can be used to derive the equation of a circle, given the center and radius	Use the Pythagorean theorem to find the <b>equation</b> of a circle	Use the Pythagorean theorem to find the <b>radius</b> of a circle	