# Mathematics 9 <br> Unit 8: Circle Geometry 

Text: Math Makes Sense 9
Chapter 8
By the end of this unit, it is expected that students will:

| Outcomes | Pages in textbook |
| :---: | :---: |
| 1. Solve problems \& justify solutions for the following circle properties: <br> - the perpendicular from a circle's center to a chord bisects the chord. <br> - the measure of the central angle is equal to twice the measure of the inscribed angle subtended by the same arc. <br> - the inscribed angles subtended by the same arc are congruent. <br> - a tangent to a circle is perpendicular to the radius at the point of tangency. <br> < Explain the relationship between the tangent of a circle and the radius at the point of tangency. <br> < Explain the relationship between the perpendicular from the center of the circle and a chord. <br> < Solve a problem involving application of one or more of the circle properties <br> < Explain the relationship between the measure of the central angle and the inscribed angle subtended by the same arc. <br> < Determine the measure of an angle inscribed in a semicircle using the circle properties. <br> < Explain the relationship between the inscribed angles subtended by the same arc. | $\begin{gathered} <~ L e s s o n \\ 8.1 \\ \text { Pages } \\ 384-391 \\ \\ <\quad \text { Lesson } \\ 8.2 \\ \text { Pages } \\ 392-399 \\ \\ <\quad \text { Lesson } \\ 8.3 \\ \text { Pages } \\ 404-412 \end{gathered}$ |
| ```Review Exercises: < Mid-Unit Review < Unit Review < Practice Test``` | Pg: 403 <br> P: 417-419 <br> Pg: 420 |

