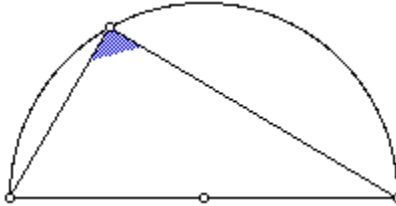


HALF AS MUCH MAY BE RIGHT

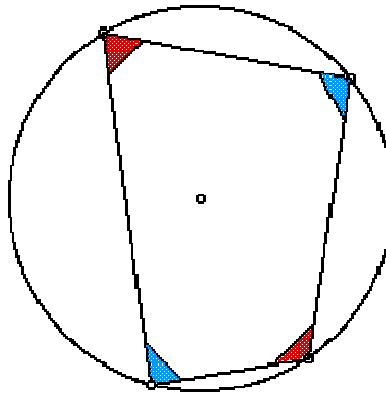
What is significant about an inscribed (blue) angle in a semi-circle? Why might this fact be true?



Conjecture:

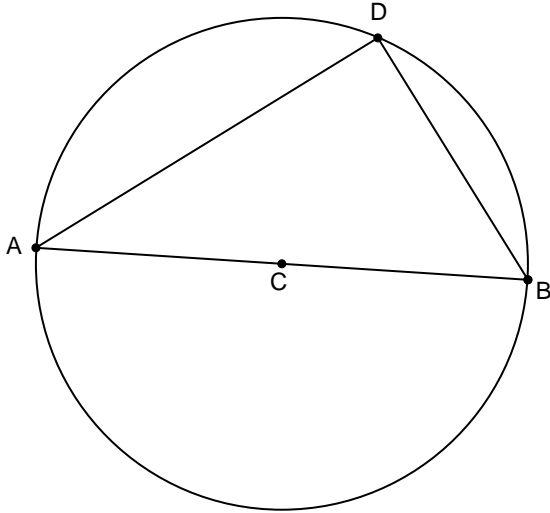
Extensions

What is the relationship between the opposite angles in a quadrilateral inscribed in a circle? Compare the blue angles and the red angles, and explain why the relationship you find must hold true.



Let's see if we can show the conjecture made above is always true.

Suppose segment AB is a diameter of the circle with center C .



Draw radius CD .

Which segments are congruent? Why?

Which angles are congruent? Why?

Let the measure of angle DAC be represented by a .

Find the measures of other angles in terms of a —justify your conclusions!!

What conclusion can you make about angle ADB ? Why?