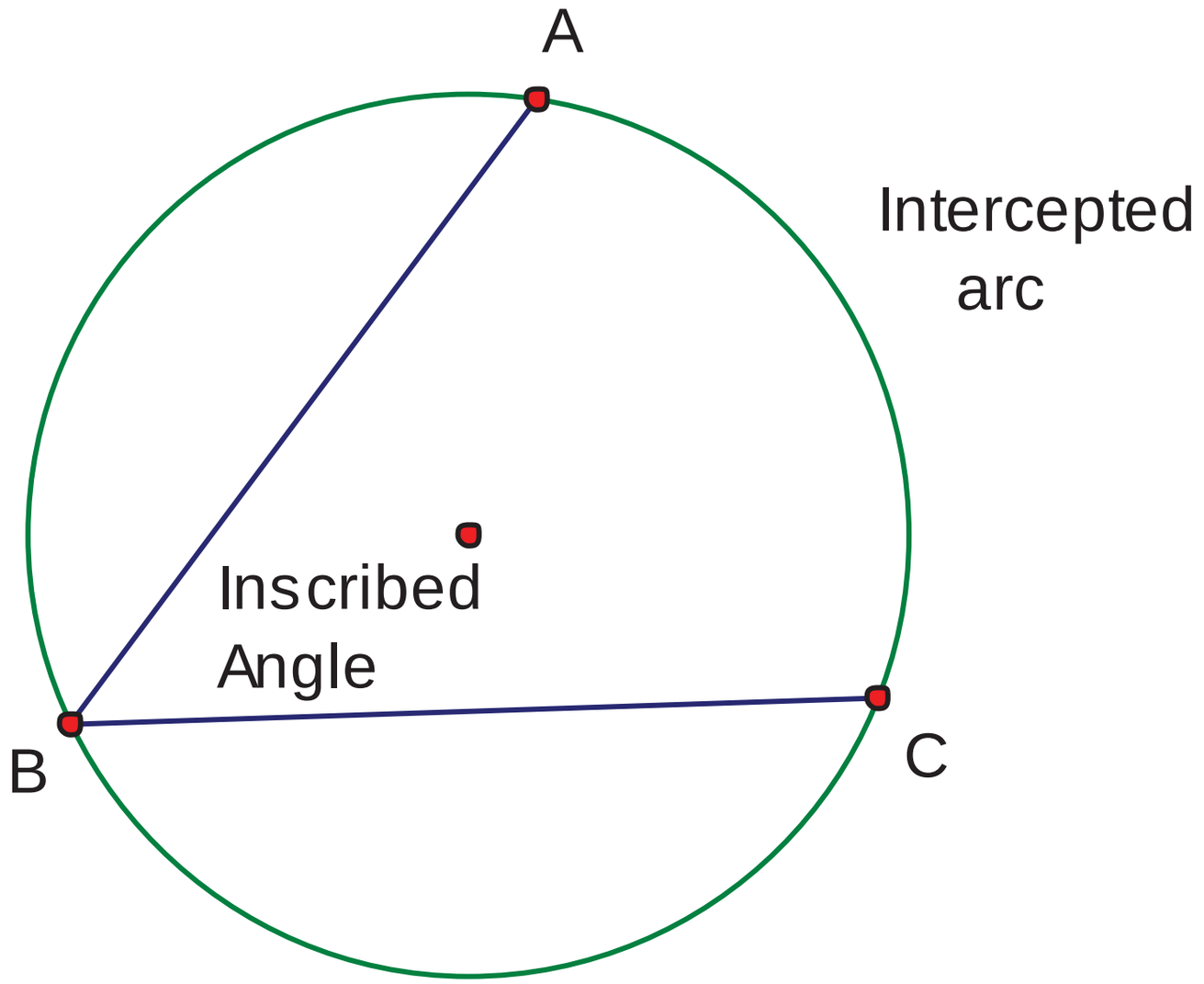
Unit 12-4 Inscribed Angles

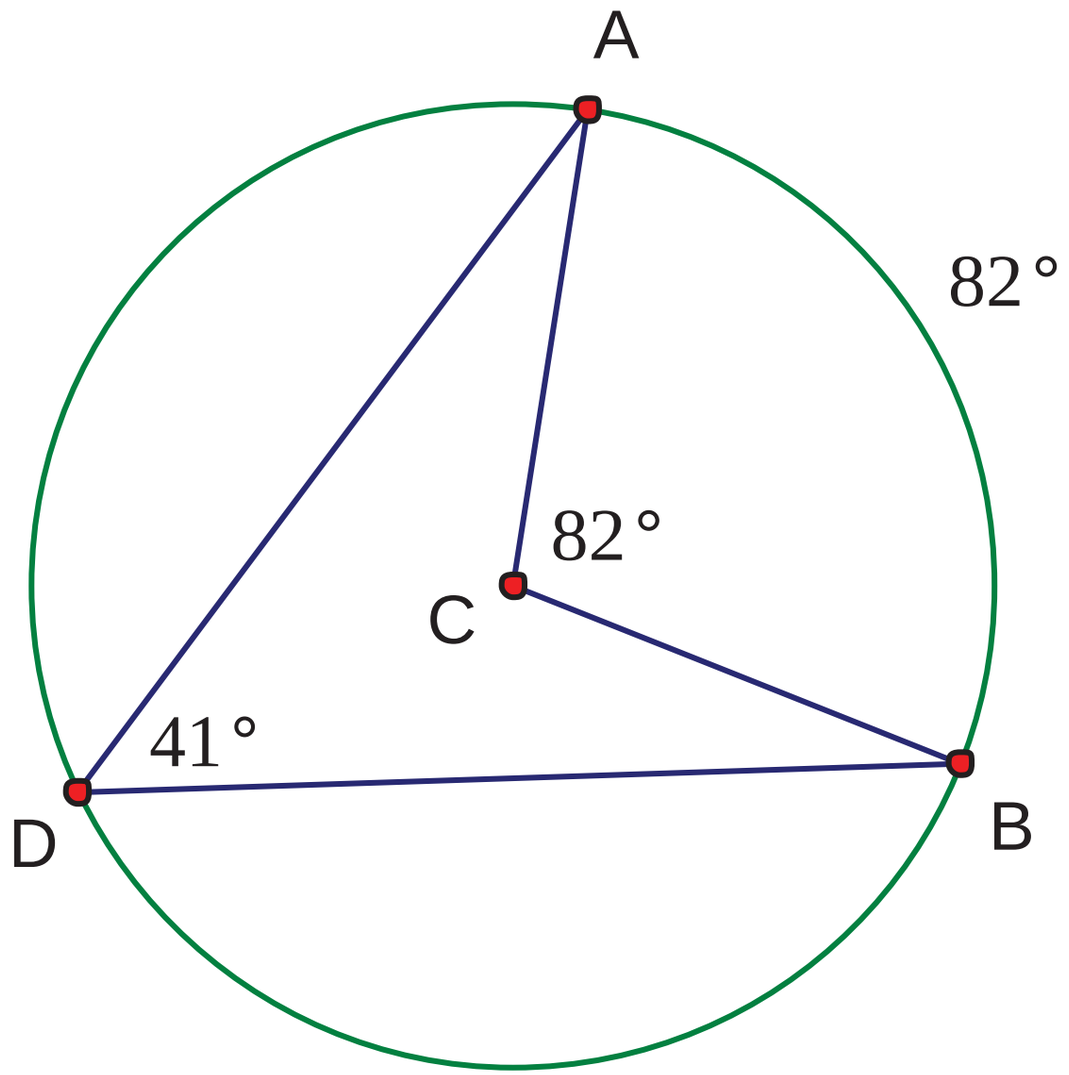
Standard 12g: Find the measure of an inscribed angle.

Standard 12h: Use inscribed angles and their properties to solve problems.

Inscribed Angle Theorem:
If an angle is inscribed in a circle, then its measure is half the measure of its intercepted arc.



Inscribed Angle Theorem:
If an angle is inscribed in a circle, then its measure is half the measure of its intercepted arc.

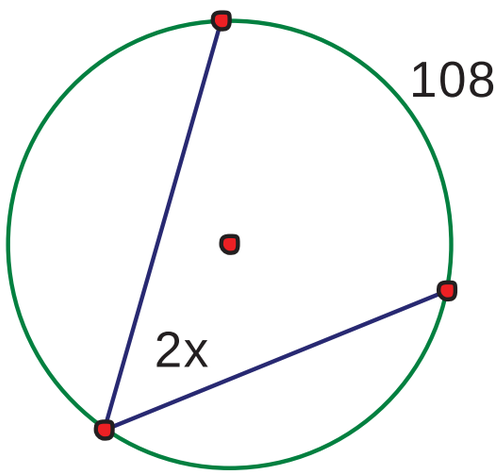


Remember that the measure of the arc and the central angle are equal

So if $m\angle ADB = 41°$

then $m\overset{\frown}{AB} = 82°$

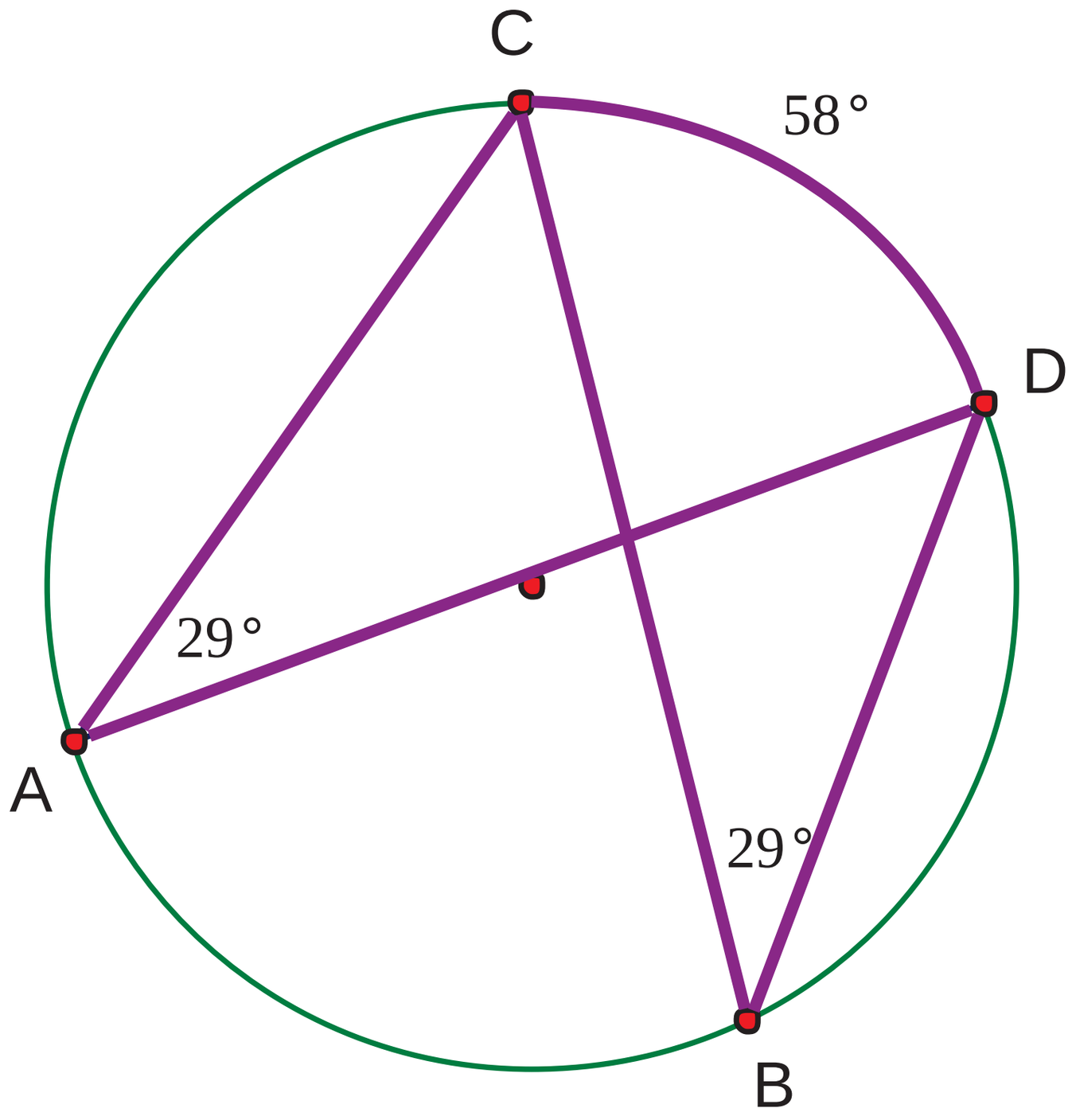
EX 1) Find the value of x.



If two inscribed angles in a circle intercept the same arc, then the angles are congruent.

$\angle A \cong \angle B$ because both inscribed angles intercept $\overset{\frown}{CD}$.

$\angle C \cong \angle D$ because both inscribed angles intercept $\overset{\frown}{AB}$.



If two inscribed angles in a circle intercept the same arc, then the angles are congruent.

$\angle A \cong \angle B$ because both inscribed angles intercept $\overset{\frown}{CD}$.

$\angle C \cong \angle D$ because both inscribed angles intercept $\overset{\frown}{AB}$.

EX 2) Find the value of x.