

High School Algebra Playlist: Deriving the Equation of a Circle

Aligns with [CCSS.Math.Content.HSG.GPE.A.1](#): Derive the equation of a circle of given center and radius using the Pythagorean Theorem; complete the square to find the center and radius of a circle given by an equation.

Related Standards

- [CCSS.Math.Content.HSG.SRT.C.8](#): Use trigonometric ratios and the Pythagorean Theorem to solve right triangles in applied problems.

PREVIEW



Objectives

In this module, you will learn and practice the following skills:

- derive the equation of a circle
- find the center and radius of a circle from its equation

Let's get started!

Key Terms

- The **Pythagorean Theorem** relates the lengths of the sides in a right triangle. For legs a and b and hypotenuse c , $a^2 + b^2 = c^2$.
- **Completing the square** is the process of rewriting an equation to form part of it as a perfect square.

PREVIEW

