High School Algebra Playlist: Proving Similarity Circles

Aligns with <u>CCSS.Math.Content.HSG.C.A.1</u>: Prove that all circles are similar.

Related Standards

• <u>CCSS.Math.Content.HSG.SRT.A.2</u>: Given two figures, use the definition of similarity in terms of similarity transformations to decide if they are similar; explain using similarity transformations the meaning of similarity for triangles as the equality of all corresponding pairs of angles and the proportionality of all corresponding pairs of sides.



Student Edition

Objectives

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

- understand similarity in circles
- prove that all circles are similar

Let's get started!

Key Terms

- Figures that are **similar** are identical in shape, but not necessarily in size.
- A circle is the set of points equidistant from a point called the center.



Proving Similarity in Circles

(CCSS.Math.Content.HSG.C.A.1)

Figures that are **similar** are identical in shape, but not necessarily in size. A **circle** is the set of points equidistant from another point.

If your students...

Confuse similarity and congruence:

WATCH: Similar triangle basics

https://www.khanacademy.org/math/geometry/similarity/triangle_similarlity/v/similar-triangle-basics

Misunderstand how to show similarity through transformations:

WATCH: Testing similarity through transformations

https://www.khanacademy.org/math/basic-geo/transformations-congruence-similarity-geo/basic-geo-congruence-similarity/v/testing-similarity-through-transformations

For more information about Proving Similarity in Circles, watch these videos:

https://learnzillion.com/lesson_plans/6602-establish-circle-similarity-using-similar-triangles

https://learnzillion.com/lesson_plans/7259-show-that-all-circles-are-similar-using-similar-triangles#fndtnlesson

