

High School Algebra Playlist: Justifying Formulas

Aligns with [CCSS.Math.Content.HSG.GMD.A.1](#): Give an informal argument for the formulas for the circumference of a circle, area of a circle, volume of a cylinder, pyramid, and cone. *Use dissection arguments, Cavalieri's principle, and informal limit arguments.*

Related Standards

- [CCSS.Math.Content.HSG.GMD.A.2](#): Give an informal argument using Cavalieri's principle for the formulas for the volume of a sphere and other solid figures.

PREVIEW



Objectives

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

- Give an informal argument for the formulas for the circumference of a circle and area of a circle.
- Give an informal argument for the formulas for the volume of a cylinder, pyramid, and cone.

Let's get started!

Key Terms

- **Cavalieri's Principle** states that solids with the same height and cross-sections have the same volume.

PREVIEW

