Formulas for Geometric Shapes

Today's Standard

HSG.GMD.A1 - 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.

Real-World Applications for this Standard

Designing circular gardens; Calculating the volume of storage tanks; Architecture and construction of pyramids and cones; Engineering applications involving cylinders

Today I Learned

Today, we learned how to find the size of circles and the amount of space inside cylinders, pyramids, and cones. We used special ways to cut and measure shapes to figure this out.

Common Stumbling Blocks

Some kids might think the formulas for shapes are made up. Others might mix up the formulas for different shapes. We use hands-on activities and clear examples to help with this.

Quiz Me

- What is the line around a circle called?
- How do you find the space inside a circle?
- What shape is a cylinder like?
- How do you find the space inside a pyramid?
- What is a cone's shape like?

Help Me

These shapes and formulas help us in real life, like building things and making containers. Knowing how to measure them helps us solve real problems.