

Geometry

Goal: The learner will understand and use properties and relationships in geometry.

Objective:

3.02 Apply geometric properties and relationships, including the Pythagorean Theorem, to solve problems.

To achieve this objective, students should:

- Apply ratios, similarity, and proportional reasoning to solve problems.
- Apply formulas for finding area, perimeter/circumference, and volume to solve problems.
- Use square roots and cube roots to find the side lengths of squares and cubes.
- Apply properties of quadrilaterals (sides, angles, and diagonals) to solve problems.
- Develop an understanding that a square root could be modeled as the measure of the length of the side of a square.
- Recognize that the Pythagorean Theorem describes a relationship between squares and right triangles.
- Identify triangles as right triangles based on side lengths (Pythagorean triples).
- Represent problem situations with geometric models.