

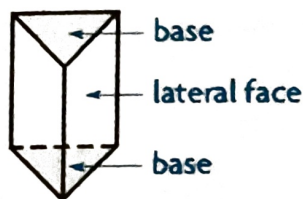
UNLOCK the Problem

A solid figure has three dimensions: length, width, and height.

Polyhedrons, such as prisms and pyramids, are three-dimensional figures with faces that are polygons.

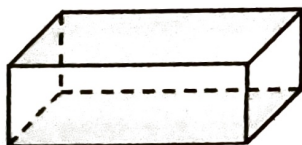
A **prism** is a polyhedron that has two congruent polygons as **bases**.

A polyhedron's **lateral faces** are polygons that connect with the bases. The lateral faces of a prism are rectangles.



A prism's base shape is used to name the solid figure. The base shape of this prism is a triangle. The prism is a **triangular prism**.

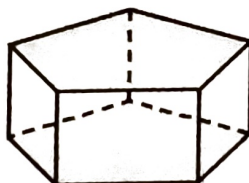
? Identify the base shape of the prism. Use the terms in the box to correctly name the prism by its base shape.



Base shape: rectangle

Name the solid figure.

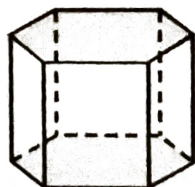
rectangular prism



Base shape: pentagon

Name the solid figure.

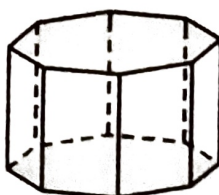
pentagonal prism



Base shape: hexagon

Name the solid figure.

hexagonal prism



Base shape: octagon

Name the solid figure.

octagonal prism

Types of Prisms

decagonal prism
octagonal prism
hexagonal prism
pentagonal prism
rectangular prism
triangular prism

10 rectangles and 2 decagons. Possible explanation: In a decagonal prism, the 2 bases are congruent decagons, and the lateral faces connecting them are rectangles. Since a decagon has 10 sides, there are 10 rectangles.

MATHEMATICAL PRACTICES

Math Talk

What shapes make up a decagonal prism, and how many are there? Explain.

- What special prism has congruent squares for bases and lateral faces? a cube