3D Shapes

Every 3-dimensional shape has three measurements to describe it: **height**, **length** and **width**.

Height

Width

Length
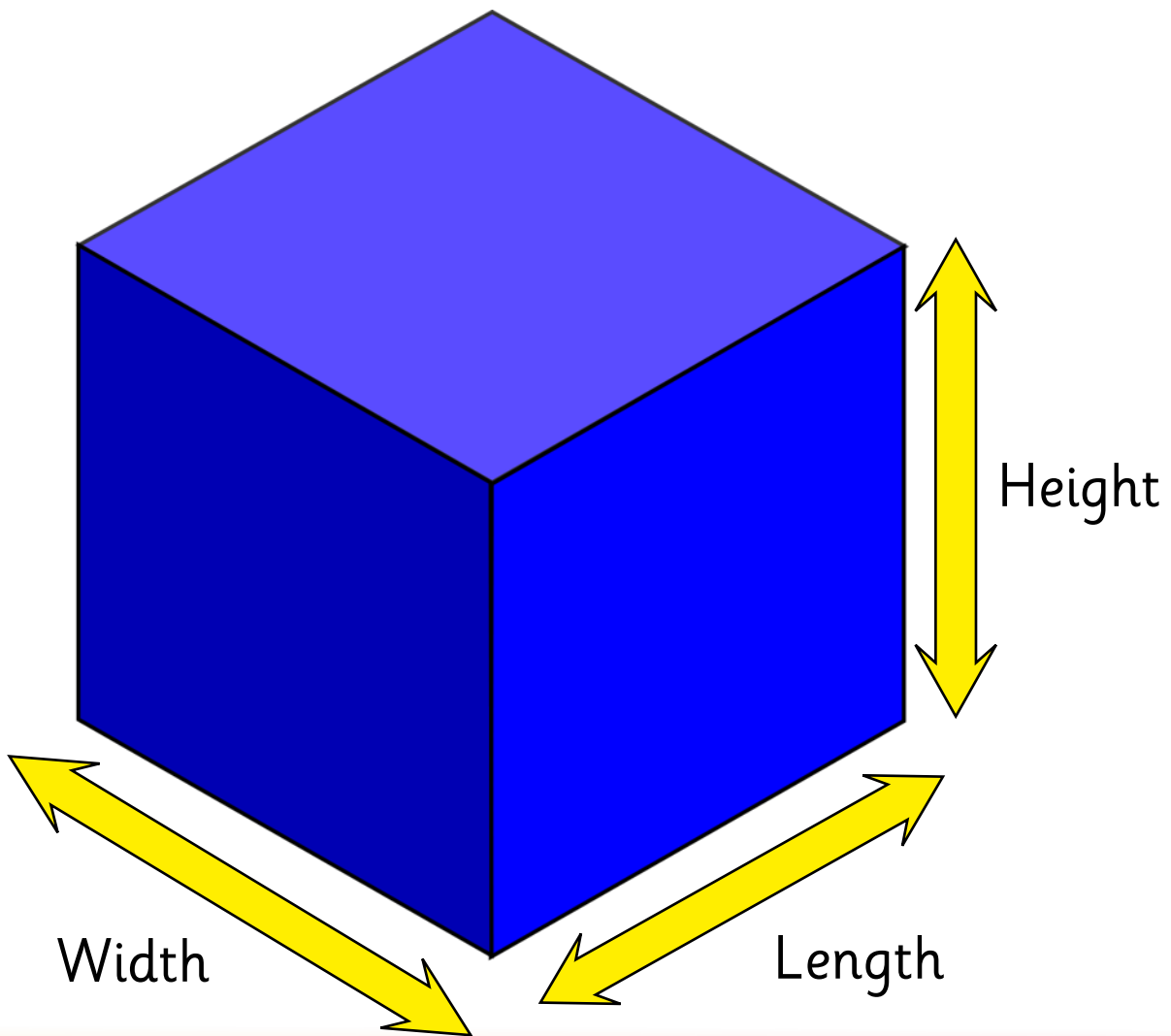
3D Shapes

Faces

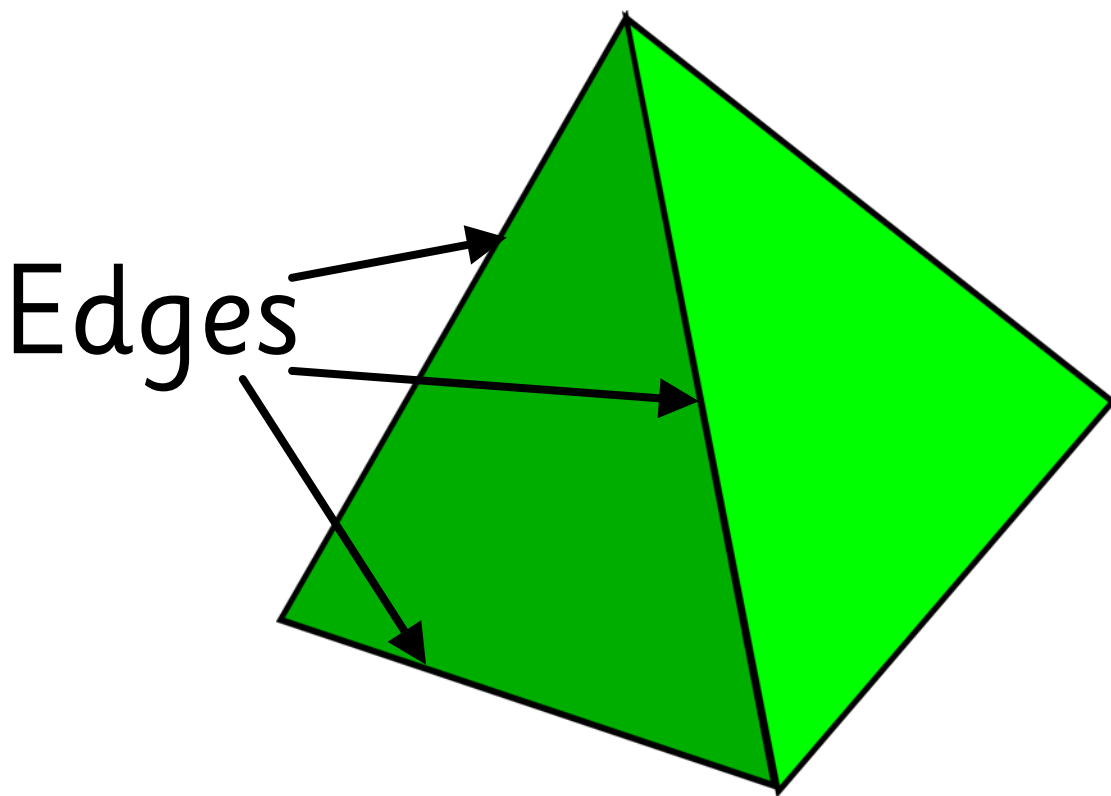A face is one of the flat sides of a three-dimensional shape.
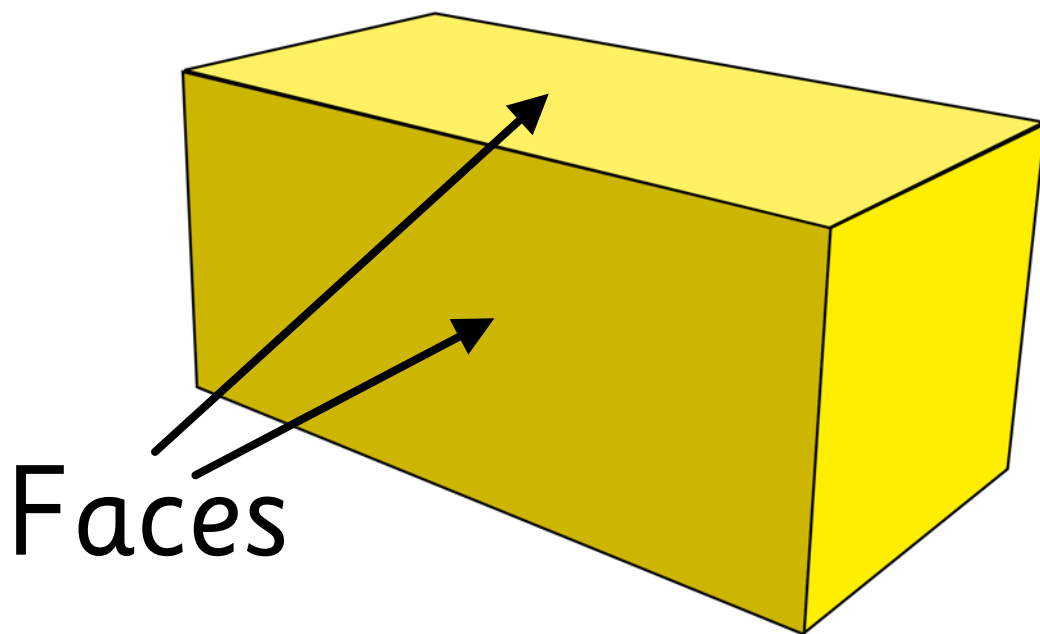
Faces

A rectangular prism has 6 flat faces. This rectangular prism has 2 square faces and 4 rectangular faces.

3D Shapes

Edges
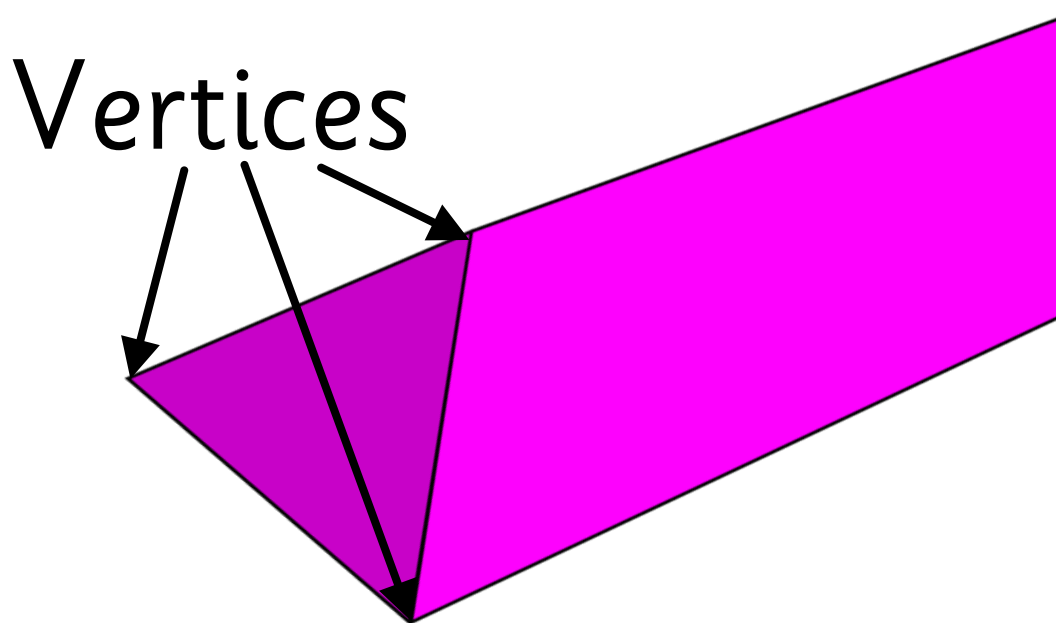
An edge is the line where two faces touch.

Edges

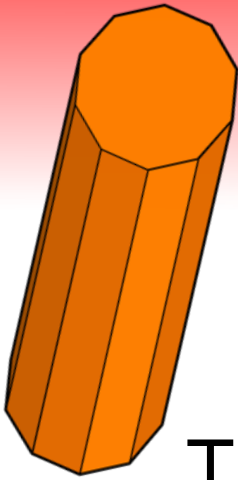A square-based pyramid has 8 edges.

Vertices

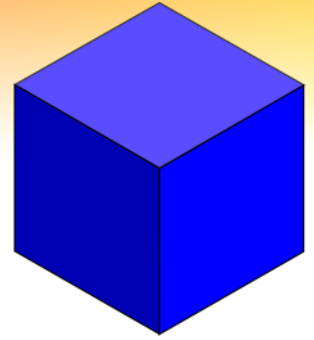Vertices are the corners of a 3D shape, where three or more edges meet.
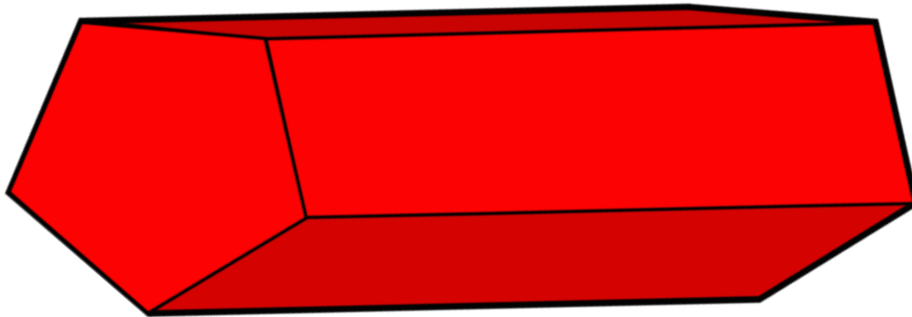A single corner is called a **vertex**.

Vertices
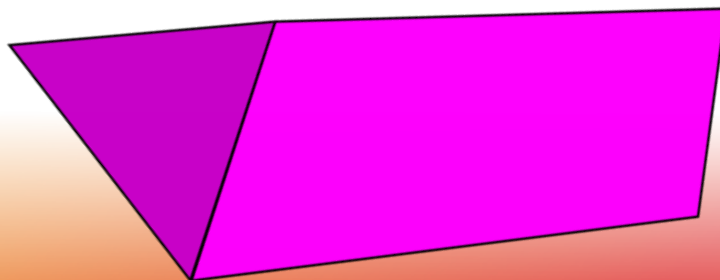
A triangular prism has 6 vertices.

3D Shapes

Prisms

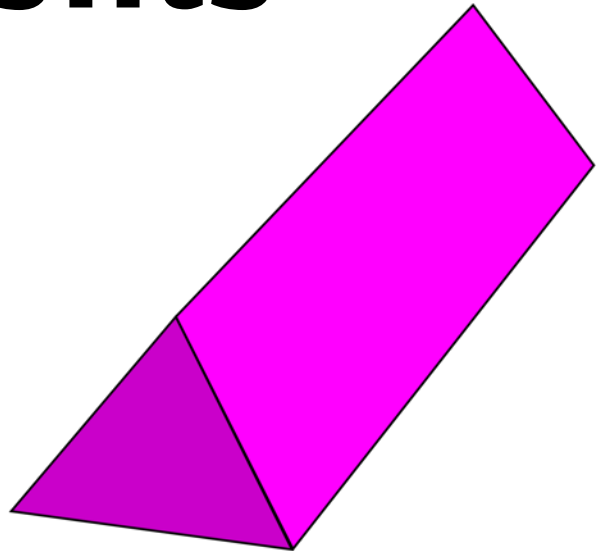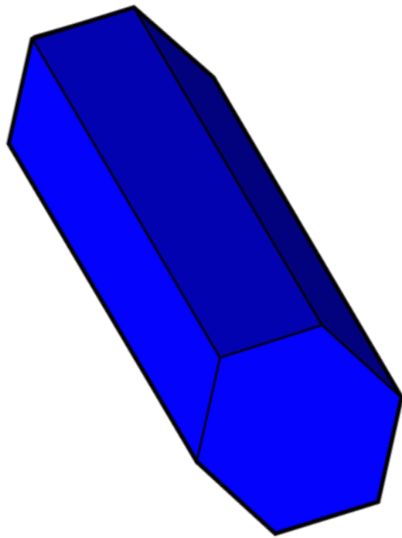The two opposite faces are the same shape.

If you cut a prism anywhere along its length, the two opposite faces will remain the same shape and size as the original.

3D Shapes

Prisms

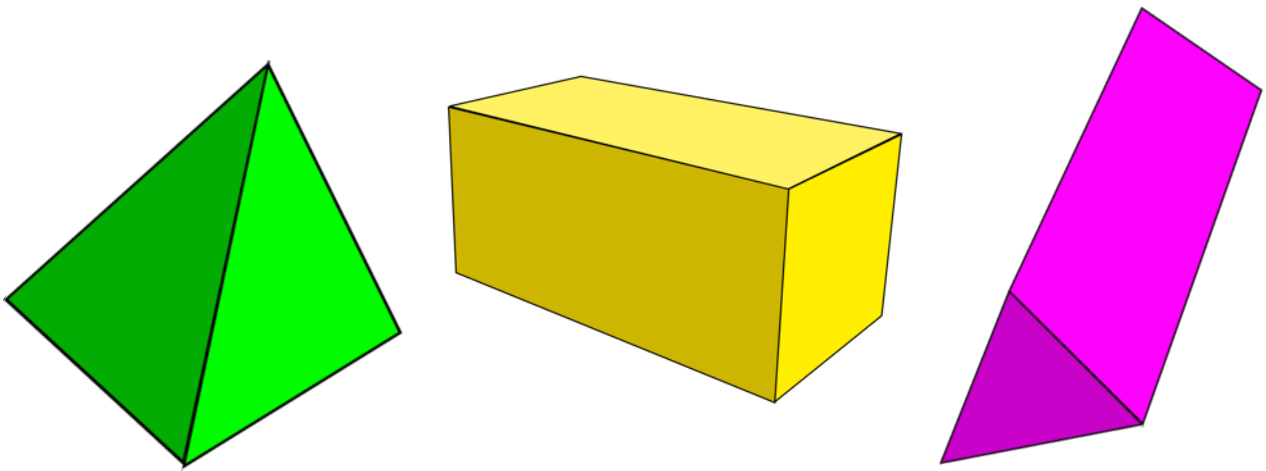A prism always has the same shape at either end.

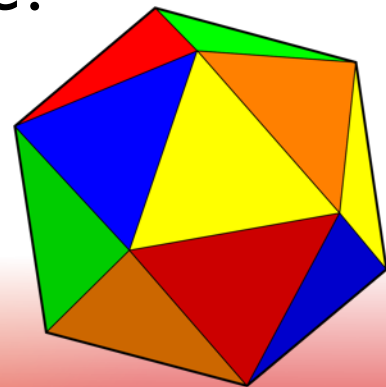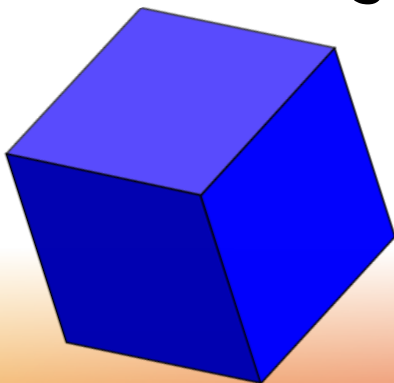A prism will always have rectangular faces on the sides.

3D Shapes

Polyhedrons

Polyhedron is a 3D shape with flat faces and straight edges.
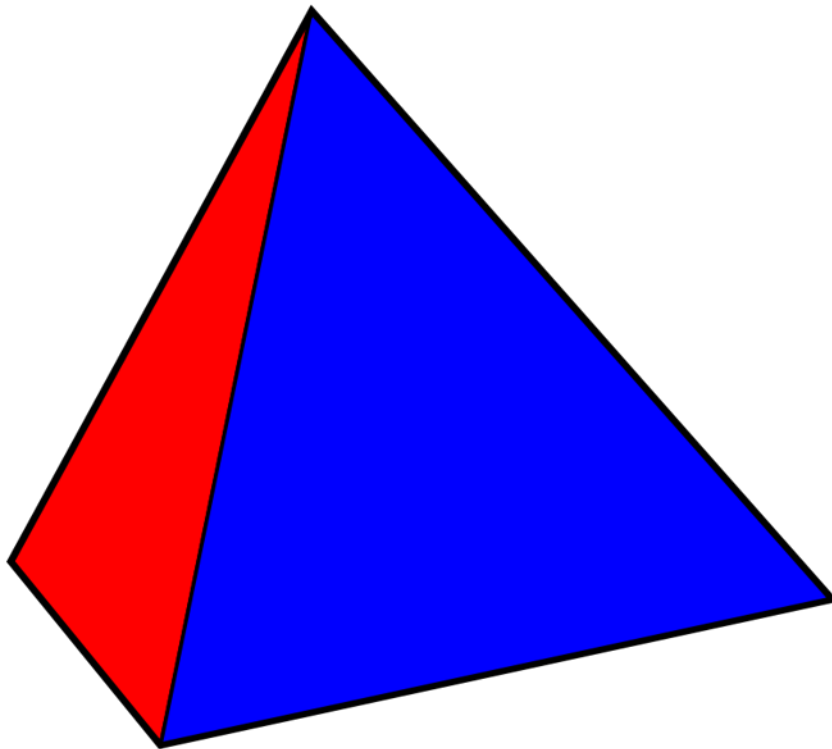
A **regular polyhedron** is a 3D shape with all the faces the same shape.

Tetrahedrons

This is a **tetrahedron**. It is a regular polyhedron.
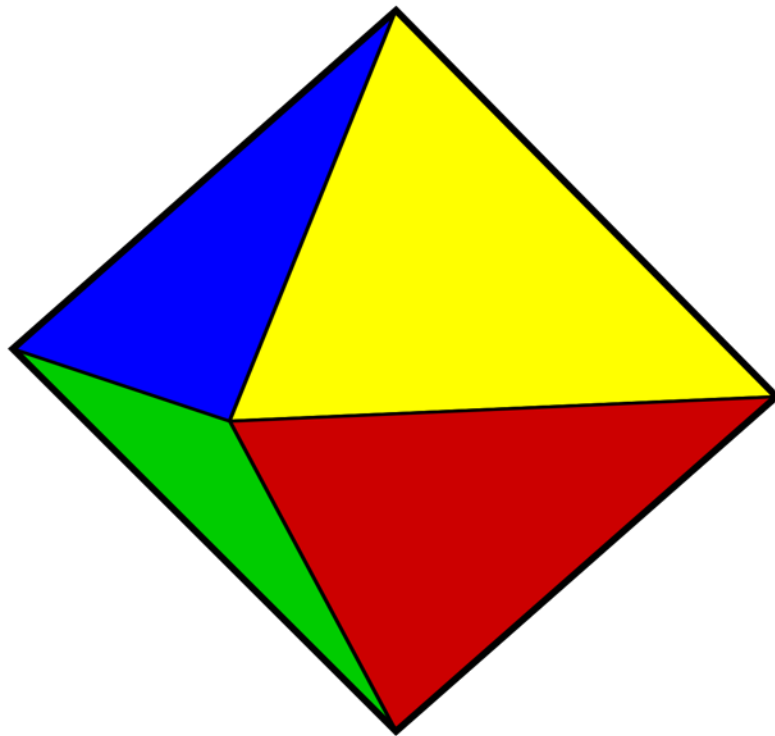
Its 4 faces are all equilateral triangles.

Octahedrons

This is an **octahedron**. It is a regular polyhedron.
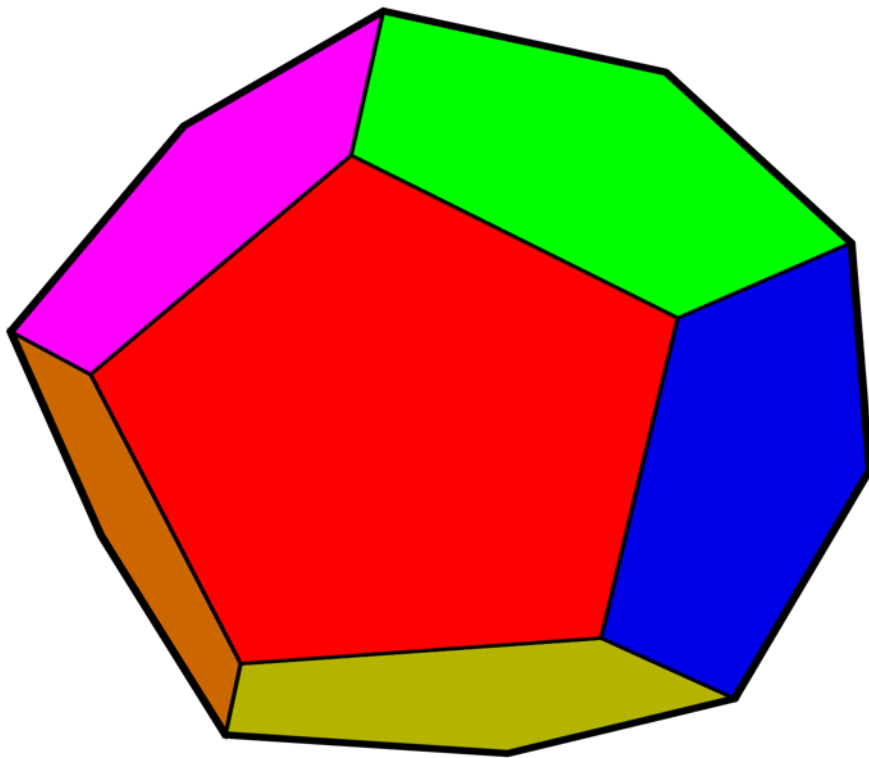

Its 8 faces are all equilateral triangles.

Dodecahedrons

This is a **dodecahedron**. It is a regular polyhedron.
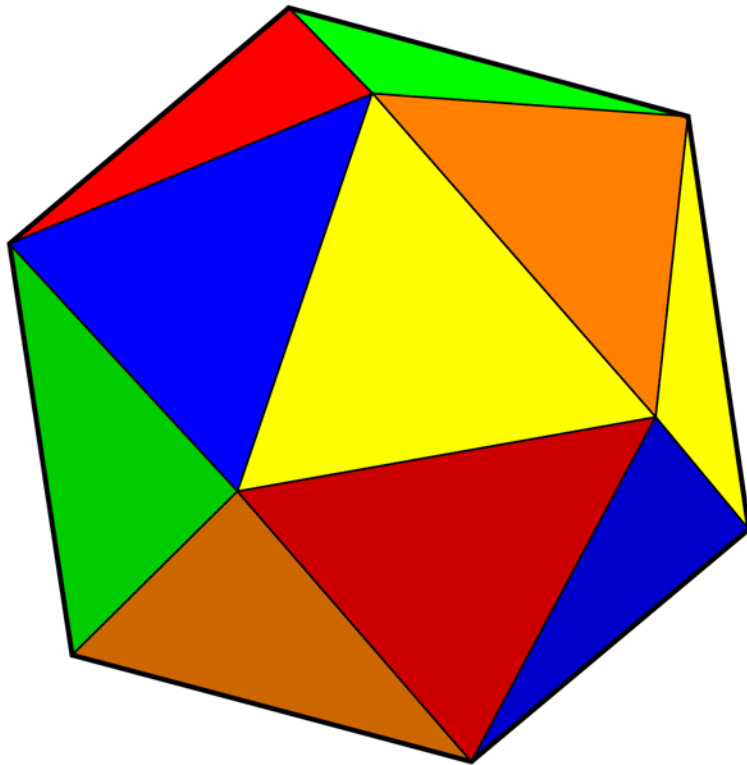

Its 12 faces are all regular pentagons.
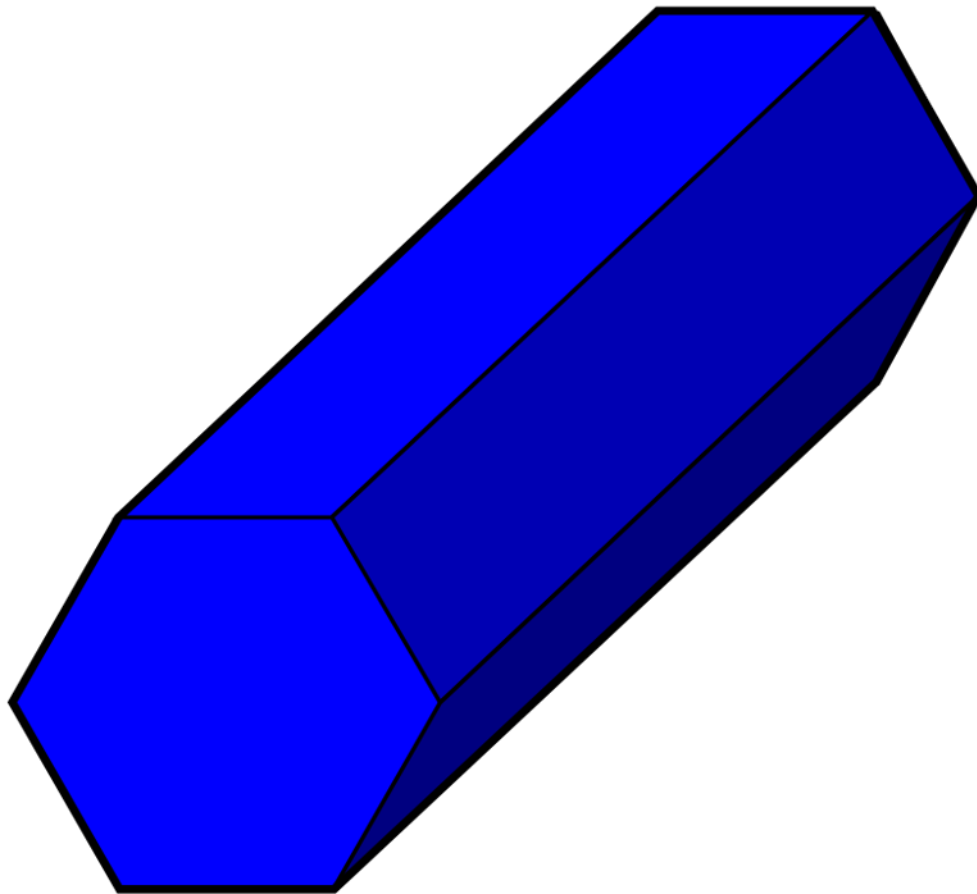
Icosahedrons

This is an **icosahedron**. It is a regular polyhedron.

Its 20 faces are all equilateral triangles.

3D Shapes

Shape facts

What type of shape is this?
Which 2D shape is at its ends?
How many vertices does it have?
How many faces does it have?

3D Shapes

Shape facts

What type of polyhedron is this?
Which 2D shapes make up its faces?
How many vertices does it have?
How many faces does it have?

3D Shapes

Shape facts

What type of polyhedron is this?
Which 2D shapes make up its faces?
How many vertices does it have?
How many faces does it have?

3D Shapes

Shape facts

What is this shape's name?
Which 2D shape is at its end?
How many vertices does it have?
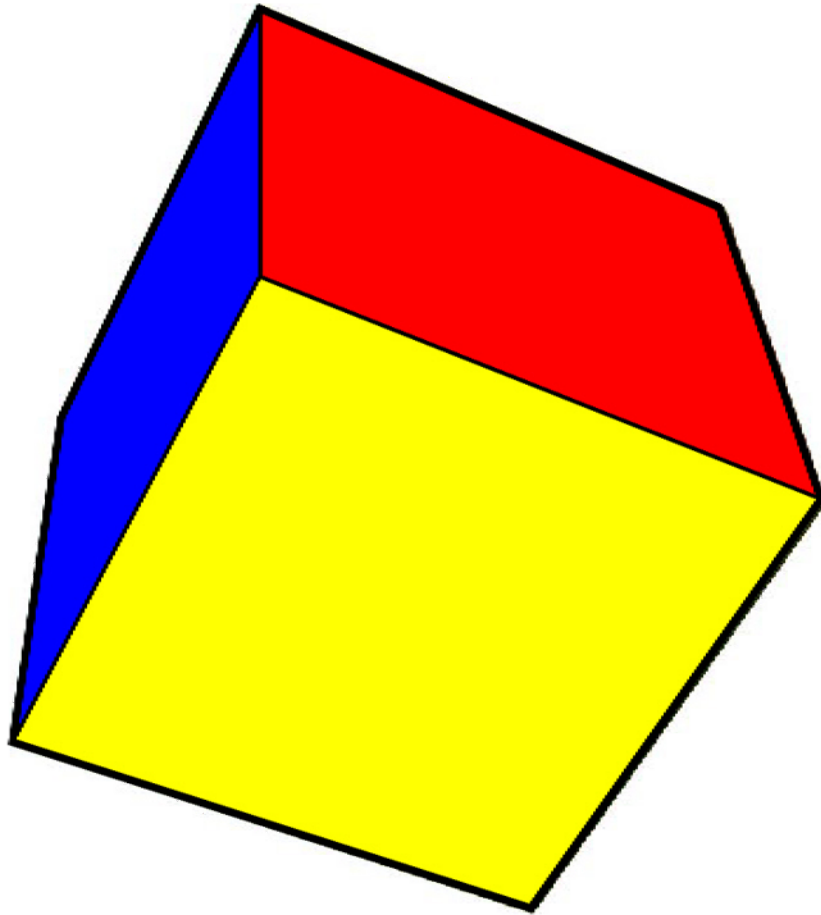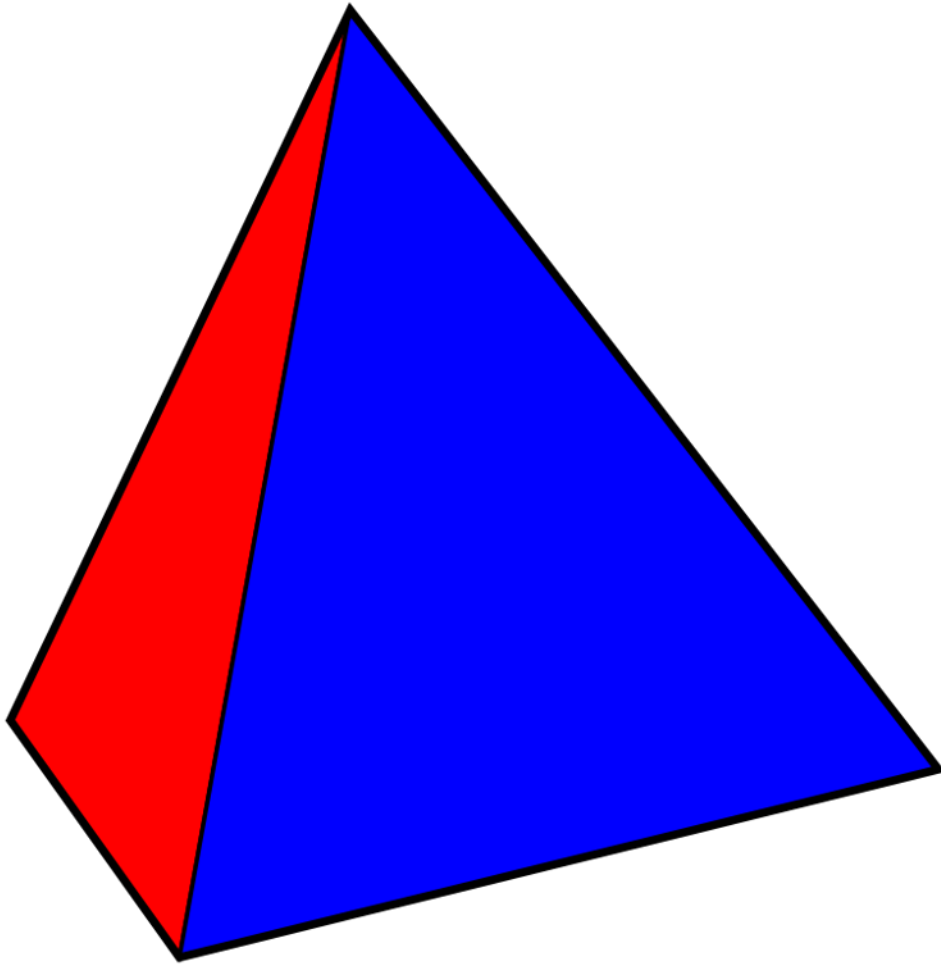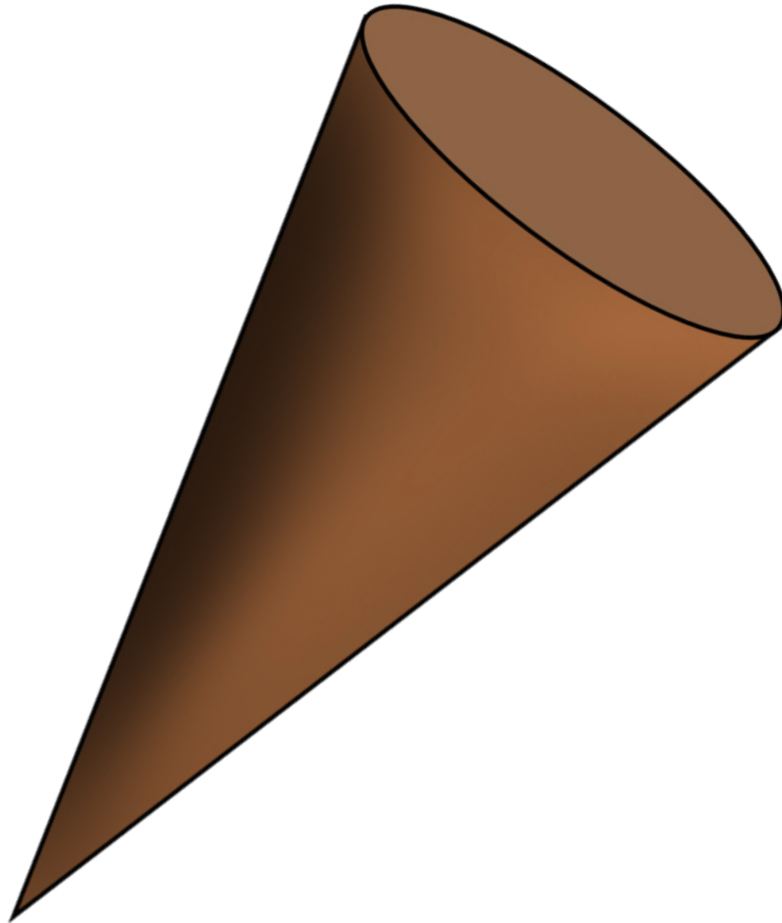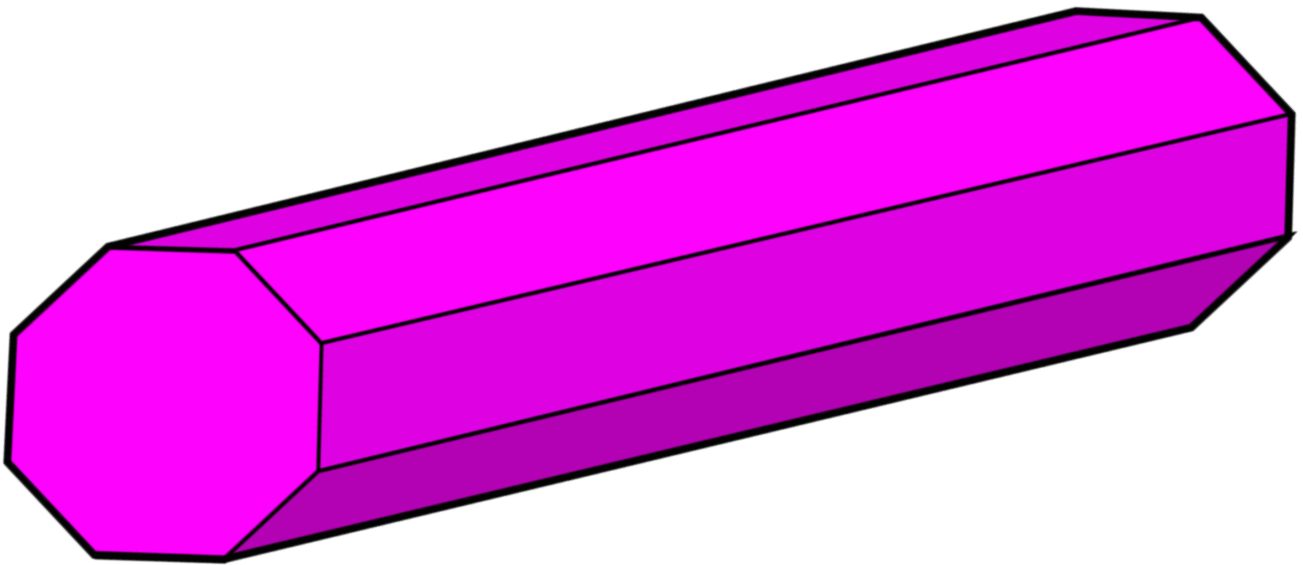How many faces does it have?

3D Shapes

Shape facts

What type of shape is this?
Which 2D shape is at its ends?
How many vertices does it have?
How many faces does it have?
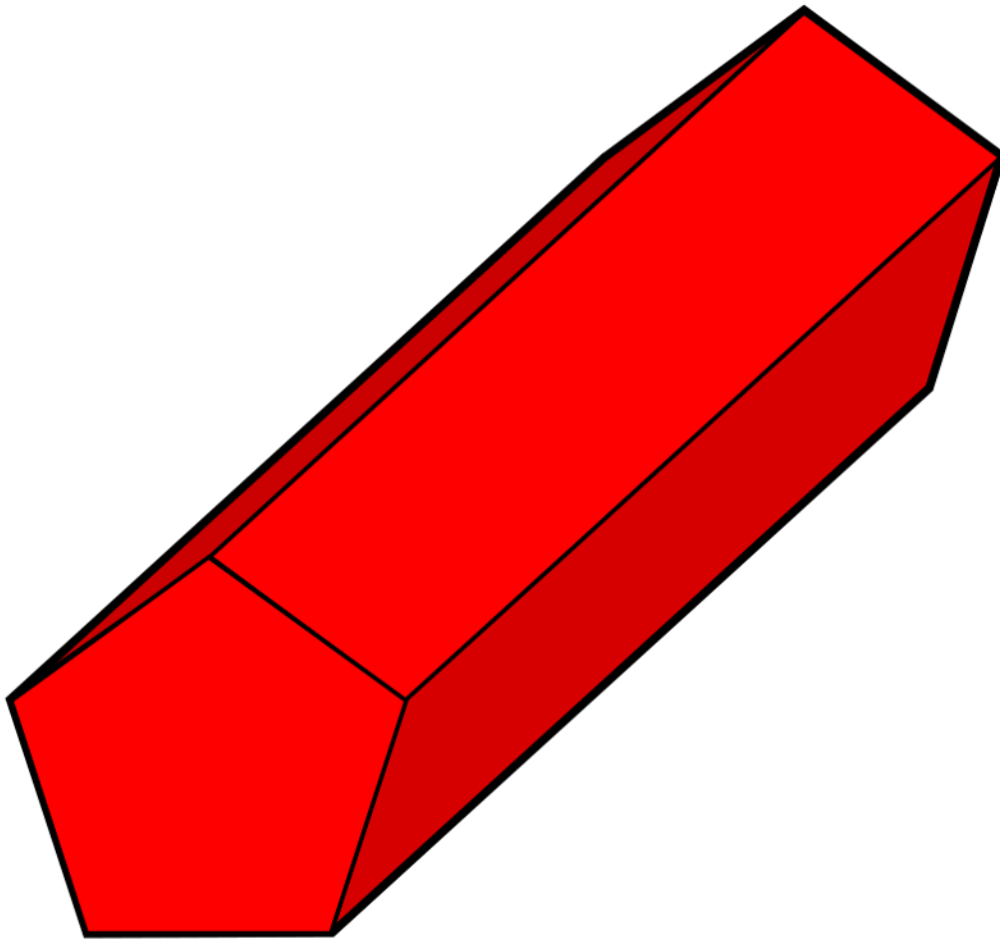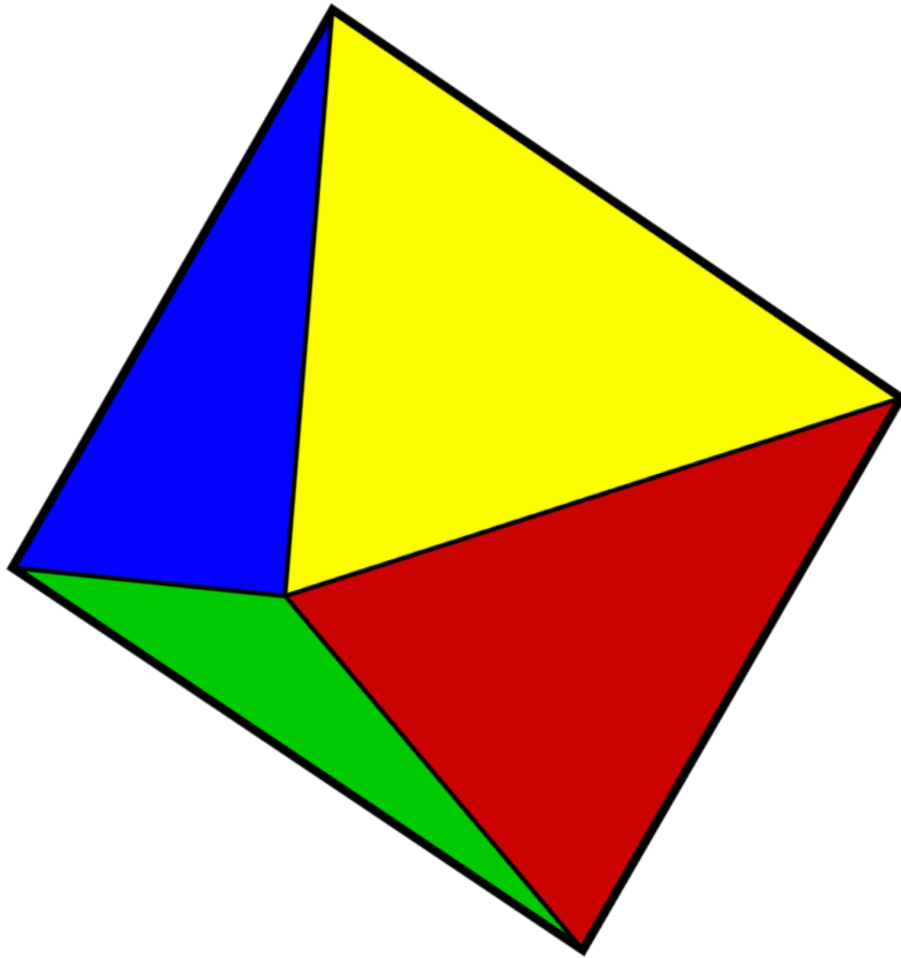
3D Shapes

Shape facts

What type of shape is this?
Which 2D shape is at its ends?
How many vertices does it have?
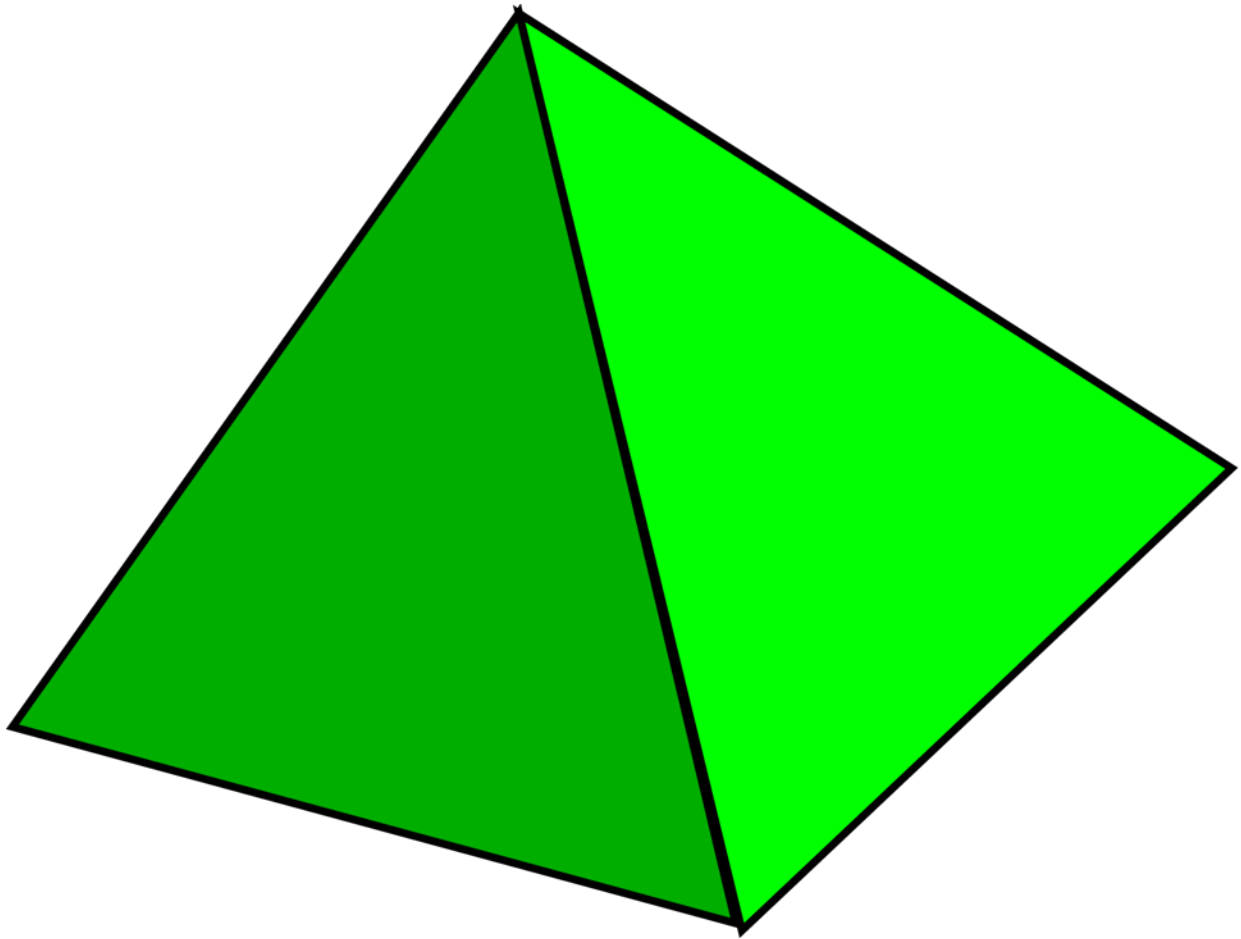How many faces does it have?

3D Shapes

Shape facts

What type of polyhedron is this?
Which 2D shapes make up its faces?
How many vertices does it have?
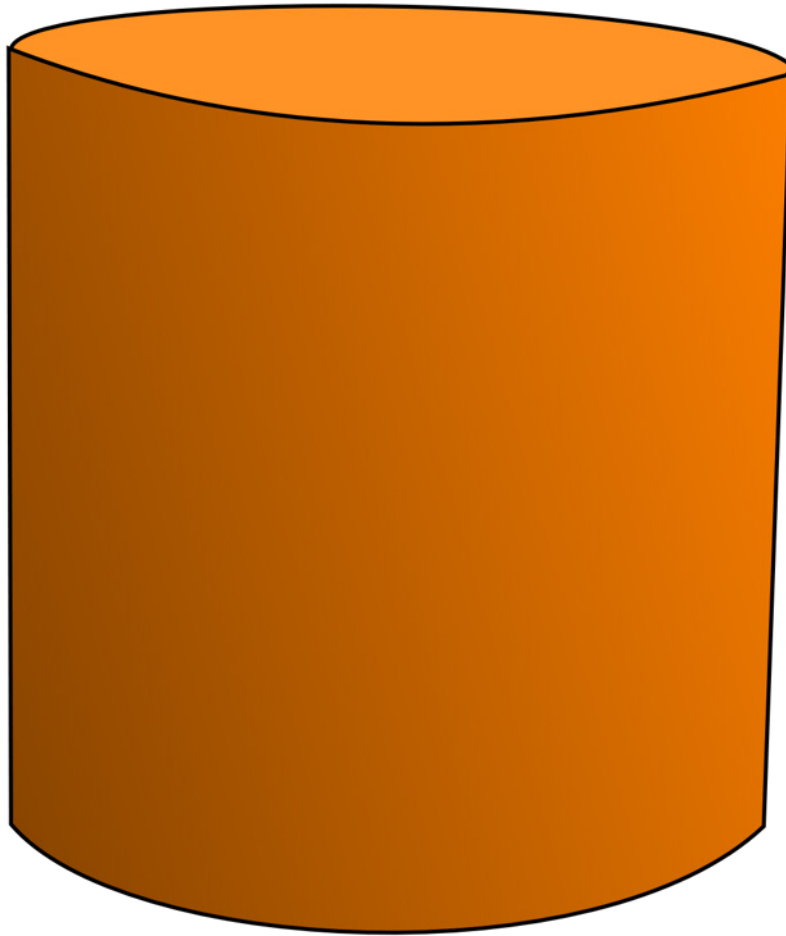How many faces does it have?

3D Shapes

Shape facts

What type of shape is this?
Which 2D shapes make up its faces?
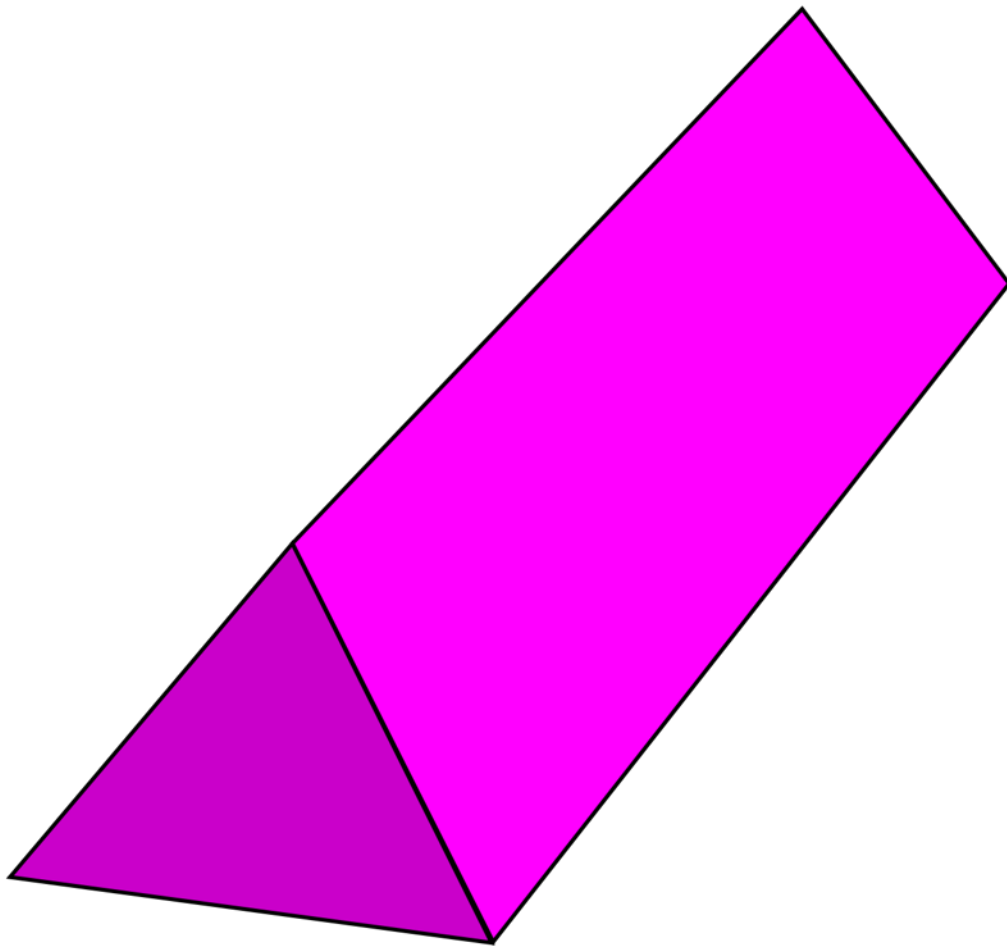How many vertices does it have?
How many faces does it have?

3D Shapes

Shape facts

What type of shape is this?
Which 2D shape is at its ends?
How many vertices does it have?
How many faces does it have?

3D Shapes

Shape facts

What type of shape is this?
Which 2D shape is at its ends?
How many vertices does it have?
How many faces does it have?