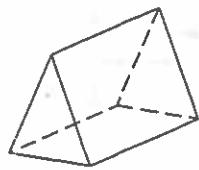


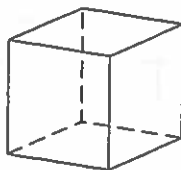
Agenda

TERMS USED IN THIS SESSION

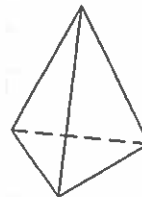
- FACE** One of the flat surfaces of a 3-D object.
- EDGE** The line segment formed where the faces of a 3-D object come together.
- VERTEX** The point formed where the edges of a 3-D object come together or where the sides of a 2-D object come together. The plural of *vertex* is *vertices*.
- SIDES** The line segments that form a 2-D polygon.
- POLYGON** A polygon is made up of line segments that join at their end points. Three-sided polygons are known as *triangles*; four-sided polygons, *quadrilaterals*; five-sided polygons, *pentagons*; six-sided polygons, *hexagons*; and eight-sided polygons, *octagons*. A polygon with all equal sides and all equal angles is called *regular*.
- PRISM** A prism is a 3-D object with two faces that are parallel. These faces are often called the *bases* of the prism. The other faces are *parallelograms*. Most familiar are prisms that have rectangles as their non-base faces. For instance, the pattern blocks are all prisms; the bases are common polygons and the other faces are rectangles. A prism that has six squares of the same size for faces is called a *cube*.
- PYRAMID** A pyramid is a 3-D object that has one polygonal face called a *base* and several triangular faces that meet in a point called a *vertex*. Pyramids are named by the base polygon. There are triangular pyramids, square pyramids, pentagonal pyramids, etc. Most familiar are pyramids in which the vertex is directly above the center of the base; these are called *right pyramids*. Pyramids that are not right are called *oblique*.



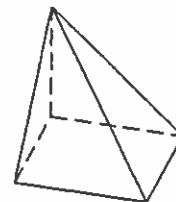
triangular prism



cube



triangular pyramid



oblique pyramid

Agenda

TERMS USED IN THIS SESSION

SIMILAR

Two polygons are similar if one is an enlargement of the other; they have exactly the same shape, but not necessarily the same size. Examples of similarity can be seen in scale diagrams, blueprints, or photographic enlargements. In order to guarantee two figures as similar, two conditions must be met: the corresponding angles must be the same measure, and the corresponding sides must be proportional.

CONGRUENT

Two figures are congruent if one is exactly the same size and the same shape as the other. One can be superimposed on the other and fit exactly. In everyday language we might say the figures are "the same." The term *congruent* is used to indicate that they are two different figures with the exactly the same measures. The two figures must have both corresponding angles and corresponding sides that are equal. Another way to define congruent is to say that the two figures are similar and that the ratio of the sides is 1:1.

TRANSFORMATION

This term refers to the various ways 2-D figures can be moved on a plane. There are three kinds of transformations that maintain congruence: a *translation* or *slide* occurs when the figure is moved horizontally or vertically, a *reflection* or *flip* occurs when the figure is reflected across a horizontal or vertical line, a *turn* or *rotation* occurs when the figure is turned about an axis.



slide/translation

flip/reflection

turn/rotation

SESSION 6

Agenda

TERMS USED IN THIS SESSION

NET

A net is a 2-D drawing of the faces of a 3-D object that can be folded up to make the object. For instance, this is a one possible net of a cube:

