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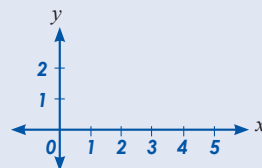
List of Mathematical Terms

Average

A single number used to describe what is typical of a set of data. The (arithmetic) mean, median and mode are examples of averages.

Axis (axes)

A linear direction, usually vertical or horizontal.



A bar or column graph and the coordinate plane each have both vertical and horizontal axes.

Axis of symmetry

See Line of symmetry.

B

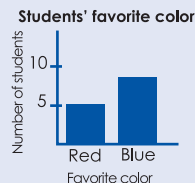
Balance

1. Equipment using a pivoted beam to compare the masses of objects, or to weigh objects.
2. The amount of money in an account.



Bar graph

A graph in which the lengths of the bars are used to represent and compare data.



Base (of a cone)

The circular face.



Base (of a place value number system)

In a place value numeration system, the grouping that is used. The decimal numeration system is a base 10 numeration system.

Base (of a power)

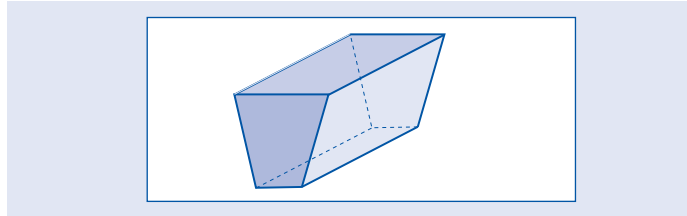
The repeated factor in a power.

In the power 4^3 , 4 is the base. In the power $(x + 2)^5$, $x + 2$ is the base.

Three-dimensional Shapes

Polyhedra

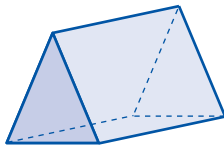
Polyhedra are three-dimensional (3-D) shapes formed by polygonal regions (faces). The single term is polyhedron.



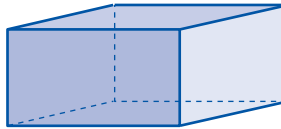
The polyhedron shown here is a hexahedron; i.e. it has six faces.

Prisms

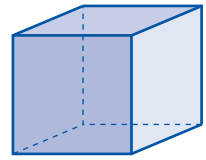
Three-dimensional shapes formed by two congruent polygonal regions in parallel planes (bases), connected by parallelogram regions.



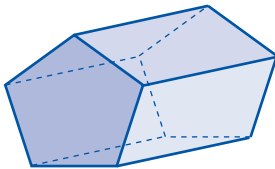
Triangular Prism



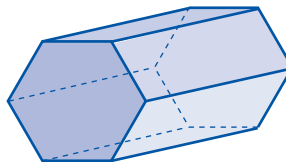
Rectangular Prism



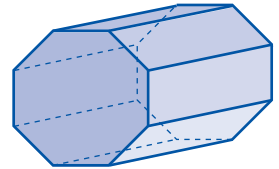
Square Prism



Pentagonal Prism

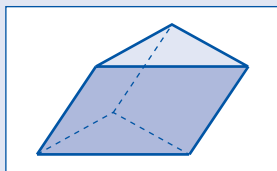


Hexagonal Prism



Octagonal Prism

Note that all the above are right prisms. The lateral faces are at right angles to the two congruent bases. Prisms that are not of this form are oblique prisms.

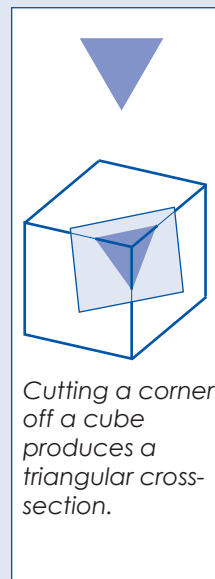
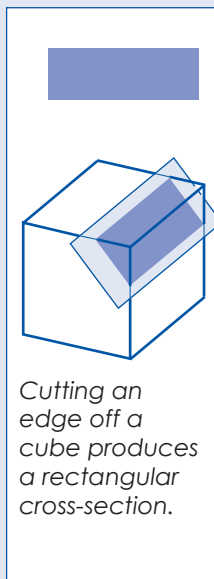
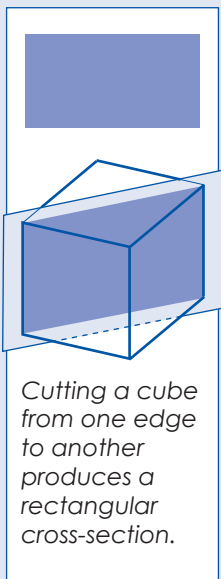
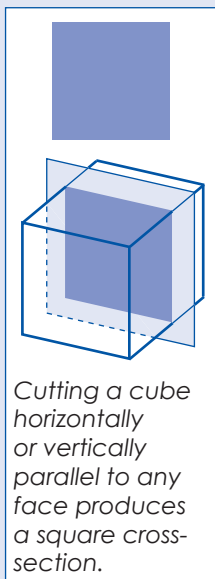


**Oblique
Triangular
Prism**

Cross-Sections and Conic Sections

Cross-sections refer to the plane regions resulting from planar cuts through 3-D objects.

Some Cross-Sections of Cubes



There are many other resulting cross sections of a cube, such as trapezoids and hexagons.

Some Cross-Sections of Cylinders

