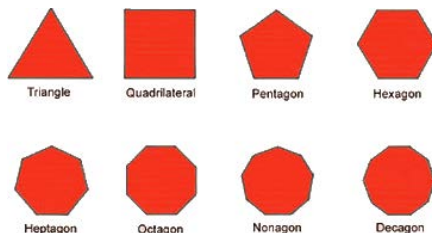


POLYGONS

PRAXIS FLASHCARD #319

POLYGON

A **polygon** is a two-dimensional shape drawn on a plane. A regular polygon is where all sides and all angles of the polygon have the same measure.



PRAXIS FLASHCARD #323

QUADRILATERAL

A **quadrilateral** is a polygon with four sides (and four vertices). Other names for a quadrilateral are a quadrangle and a tetragon. The interior angles of a quadrilateral add to 360° . An excellent graphic showing the Euler diagram of quadrilateral types can be found on Wikipedia: http://en.wikipedia.org/wiki/File:Euler_diagram_of_quadrilateral_types.svg

PRAXIS FLASHCARD #31

SQUARE

A **square** is a regular polygon made up of four equal sides and four equal angles of 90 degrees each.

$$A = s^2 \quad P = 4s$$



PRAXIS FLASHCARD #29

RECTANGLE

A **rectangle** is any quadrilateral with four right angles.

$$A = lw \quad P = 2l + 2w$$



PRAXIS FLASHCARD #36

CIRCLE

A **circle** is a closed figure made up of all points that are equidistant from another point (the center). The distance from the center point to the edge of the circle is called the **radius**.

$$A = \pi r^2 \quad C = \pi d \text{ or } C = 2\pi r$$



PRAXIS FLASHCARD #30

TRIANGLE

A **triangle** is a polygon with three angles/vertices and three sides made up of line segments. A triangle can be named by its three vertices: $\triangle ABC$.

$$A = \frac{1}{2}bh \quad P = a + b + c$$



PRAXIS FLASHCARD #105

RHOMBUS

A **rhombus** is a two-dimensional quadrilateral where all four sides are the same length. Thus, a square is a specialized rhombus.

$$P = 4s \quad A = bh$$



PRAXIS FLASHCARD #32

PARALLELOGRAM

A **parallelogram** is a quadrilateral with two pairs of parallel sides.

$$A = bh \quad P = 2(b_1 + b_2)$$



PRAXIS FLASHCARD #34

TRAPEZOID

A **trapezoid** is a convex quadrilateral with at least one pair of parallel sides. (Outside of the United States, a trapezoid is called a **trapezium**.) The parallel sides are called bases and the other two sides are called legs.

$$A = \frac{1}{2}h(b_1 + b_2) \quad P = \text{add all four sides}$$



PRAXIS FLASHCARD #382

THE TOTAL DEGREES OF MEASURE INSIDE EVERY N-SIDED SHAPE

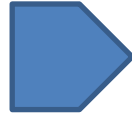
Subtract 2 from the number of sides and multiply by 180 degrees.

$$180(n - 2)$$

PRAXIS FLASHCARD #250

CONVEX

Convex describes an object such as a polygon that is not concave. All vertices of a convex polygon are less than 180-degrees in measure:



PRAXIS FLASHCARD #251

CONCAVE

Concave describes an object with a hollowed out or cut out portion—a part of the object has been “caved” in. The opposite of a concave polygon is a convex polygon.



PRAXIS FLASHCARD #275

EQUIANGULAR POLYGON

An **equiangular polygon** is one where all angles of the polygon are the same measure. If a polygon is both equiangular and equilateral, it is called a regular polygon.

PRAXIS FLASHCARD #276

EQUILATERAL POLYGON

An **equilateral polygon** is one where all sides of the polygon are the same measure. If a polygon is both equiangular and equilateral, it is called a regular polygon.

PRAXIS FLASHCARD #329

REGULAR POLYGON

An **equiangular polygon** is one where all angles of the polygon are the same measure. An **equilateral polygon** is one where all sides of the polygon are the same measure. If a polygon is both equiangular and equilateral, it is called a **regular polygon**.
