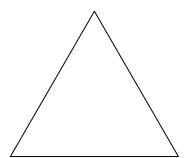
## **POLYGONS**

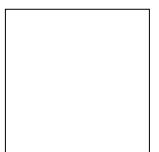
- 1. A *polygon* is a simple closed plane curve that consists of line segments. In a polygon, each line segment is called a **side** of the polygon. A common endpoint of two line segments is called a **vertex** of the polygon.
- 2. A *regular polygon* is a polygon in which all of the sides have equal measures, and all of the angles have equal measures.
- 3. A *triangle* is a polygon with three sides, and three angles.
  - a) An *acute triangle* is a triangle that has three acute angles
  - b) An equiangular/equilateral triangle is a triangle that has three angles, and sides equal in measure
  - c) A *right triangle* is a triangle that has one right angle
  - d) An *obtuse triangle* is a triangle that has one obtuse angle
  - e) An isosceles triangle is a triangle with two sides in equal length, and two angles of equal measure
  - f) A scalene triangle is a triangle that has no sides equal in length, and no angles are equal in measure
- 4. A *quadrilateral* is a polygon that has four sides
  - a) A *trapezoid* is a quadrilateral in which two and only two opposite sides are parallel. The parallel sides are called the **bases** of the trapezoid
  - b) A *parallelogram* is a quadrilateral in which both pairs of opposite sides are parallel
  - c) A *rectangle* is a parallelogram in which all four angles are right angles
  - d) A *rhombus* is a parallelogram in which all sides are of equal length
  - e) A *square* is a rectangle in which all sides are of equal length
- 5. A *pentagon* is a polygon that has five sides
- 6. A *hexagon* is a polygon that has six sides
- 7. A *heptagon* is a polygon that has seven sides
- 8. An *octagon* is a polygon that has eight sides
- 9. A *nonagon* is a polygon that has nine sides
- 10. A *decagon* is a polygon that has ten sides

The regular polygons that you are responsible for knowing how to draw are as follows:

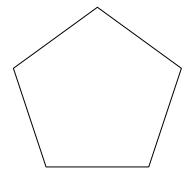
1. A regular triangle



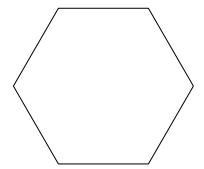
2. A regular quadrilateral



3. A regular pentagon



4. A regular hexagon



5. A regular octagon

