**2.** Figure B. A trapezoid is a quadrilateral with exactly one pair of parallel sides.

**3.** Figure D. A rhombus is a quadrilateral with four congruent sides.

**4.** Figure F. A rectangle is a parallelogram with four congruent angles.

**5.** Figure C. A kite is a quadrilateral with two distinct pairs of consecutive congruent sides.

**6.** Figures A, D, and F. A parallelogram is a quadrilateral with two pairs of parallel sides.
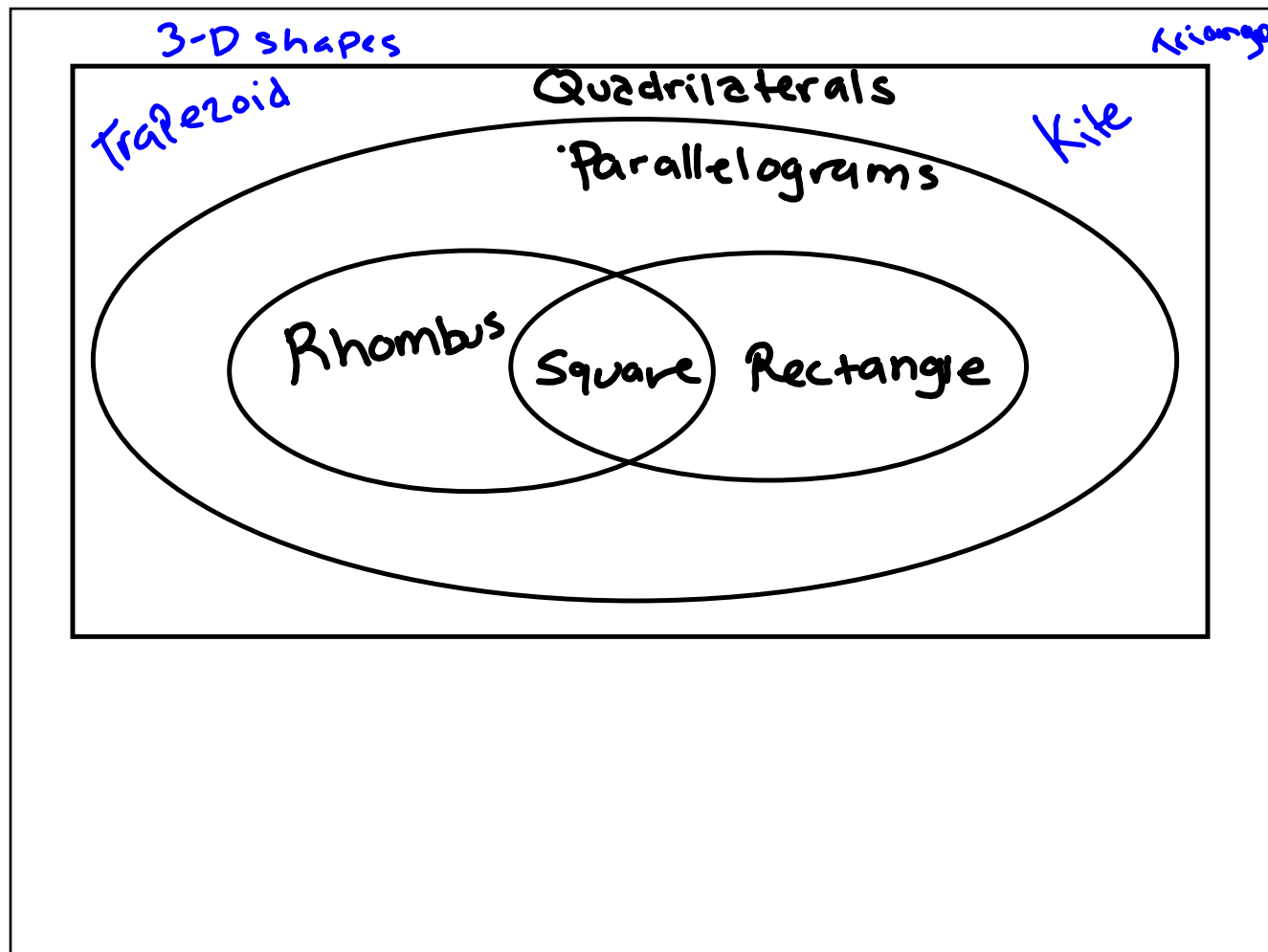
**7.**

**8.**

**9.**

**10.**
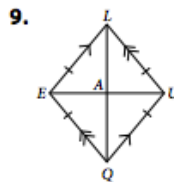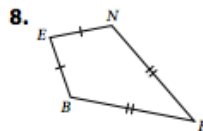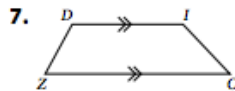
**11.** To have two outside diagonals, the hexagon must be concave with two "dents."

**12.** A regular quadrilateral has four congruent sides and four congruent angles. It is a square.

3-D shapes

Triangle

Trapezoid

# Quadrilaterals

Kite

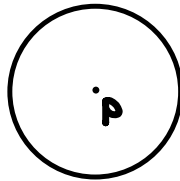## Parallelograms

Rhombus  Square  Rectangle

# 1.7 Circles

Circle - set of all points in a plane at a given distance from a given point
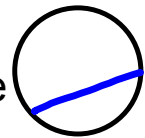
Center - the given point

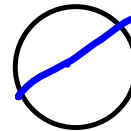Radius - the distance from the center to the circle

*if you see a point at the center of a circle, you can assume it is the center*
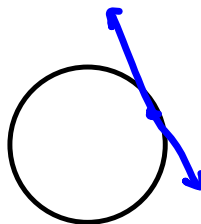
Investigation - page 65 (10 minutes)

Chord - A line segment whose endpoints lie on the circle

Diameter - a chord that passes through the center.  A diameter is
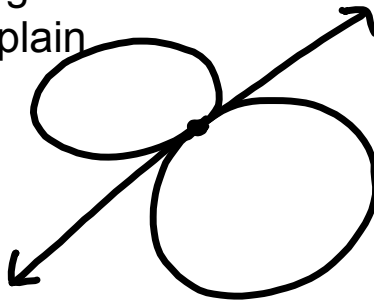
the longest chord.

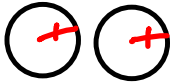Tangent - A line that intersects the circle only once

Can a chord of a circle also be a diameter of the circle?  Can it be a tangent?  Explain why or why not.

Can two circles be tangent to the same line at the same point? Draw a sketch and explain

Congruent circles - have the same radius

Concentric circles - two or more coplanar circles that have the
same center

Arc - two points on the circle and a continuous part of the circle
between the two points
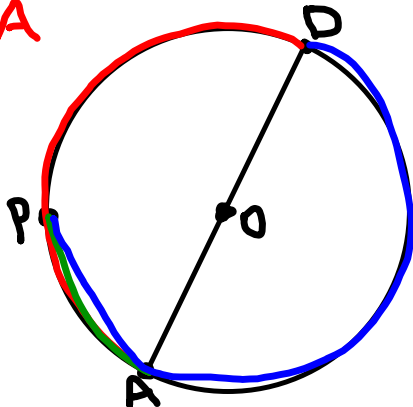
Arcs: semicircle, minor arc, major arc

$\overset{\frown}{APD}$

$\overset{\frown}{DPA}$

$\overset{\frown}{AP}$

$\overset{\frown}{PA}$

$\overset{\frown}{PAD}$

$\overset{\frown}{DAP}$

$\overset{\frown}{DP}$

# Arc measure = central angle

60°

60°

Center is
the
vertex of
the angle

300°

300°

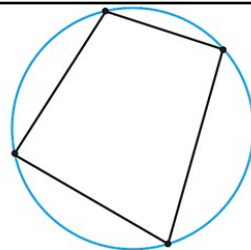<ABC
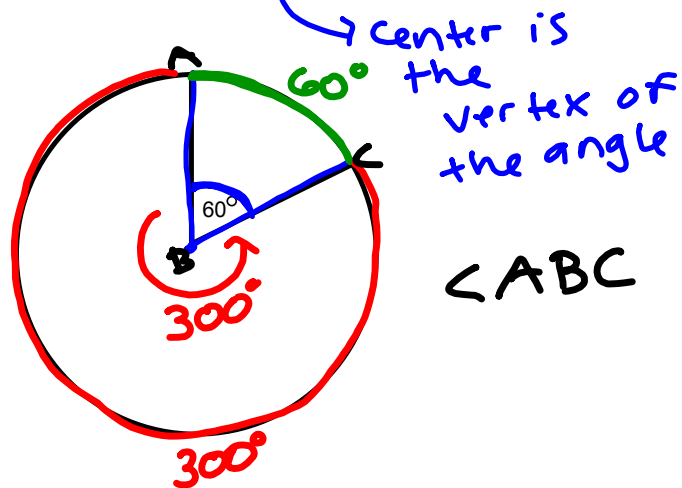
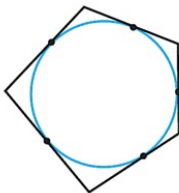A circle is **circumscribed** about a polygon if and only if it passes through each vertex of the polygon.
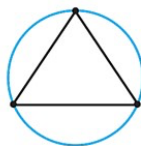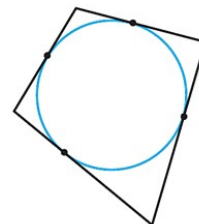
Circumscribed circle

Circumscribed circle

A circle is **inscribed** in a polygon if and only if it touches each side of the polygon at exactly one point.

Inscribed circle

Inscribed circle

August 28, 2019