What is a Circle?
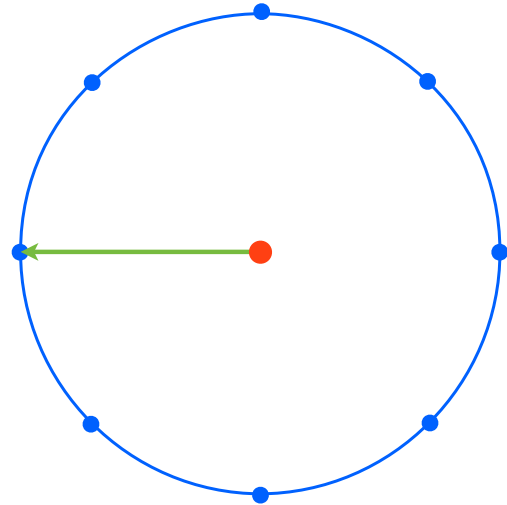
Circle - the set of all points that are the same distance from a given point.

What is a Circle?

Circle - the set of all points that are the same distance from a given point.

The given point is called the center of the circle.

The radius of a circle is the segment with one endpoint at the center and the other point on the circle.

radius

Center

radius

radius

What is a Circle?

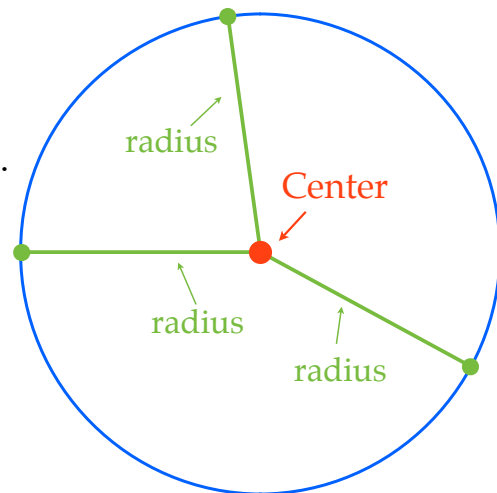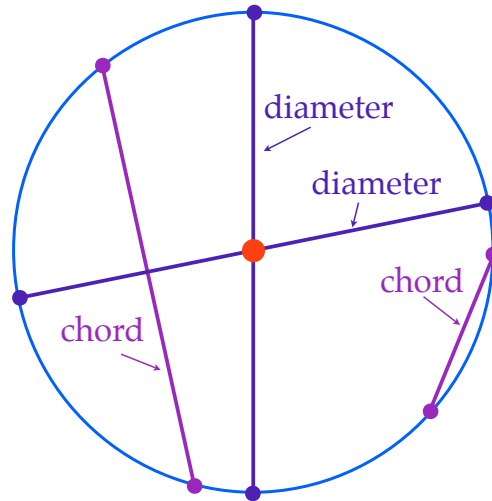Circle - the set of all points that are the same distance from a given point.

The given point is called the center of the circle.

The radius of a circle is the segment with one endpoint at the center and the other point on the circle.

A chord of a circle is a segment whose endpoints are on the circle.

A diameter of a circle is a chord that goes through the center of the circle.
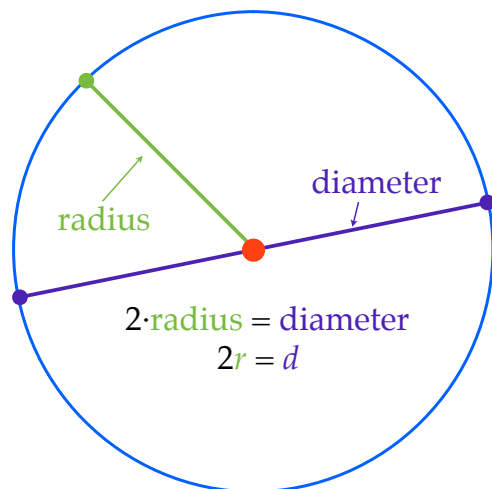
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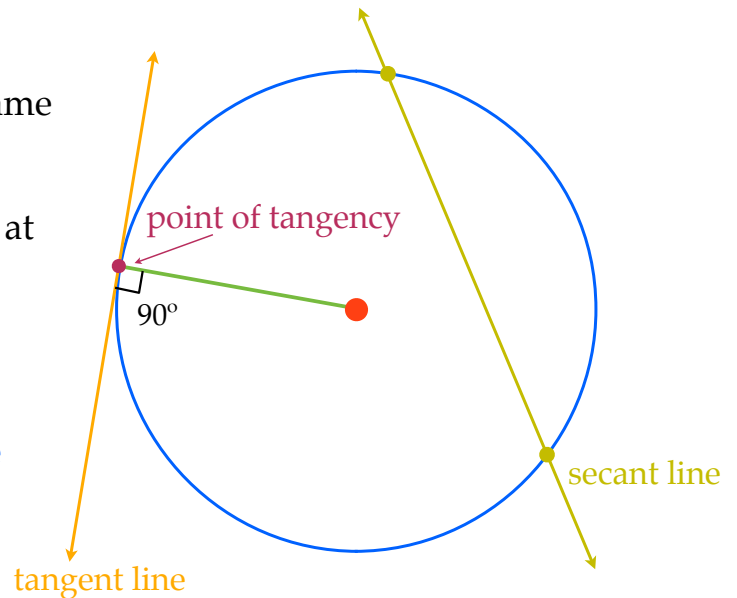A diameter of a circle is a chord that goes through the center of the circle.

$$2 \cdot \text{radius} = \text{diameter}$$
$$2r = d$$

What is a Circle?

Circle - the set of all points that are the same distance from a given point.

A secant is a line that intersects the circle at two points.

A tangent line is a line that intersects the circle at one point.

The point of intersection between a circle and the tangent line is called the point of tangency.

point of tangency

90º

tangent line

secant line

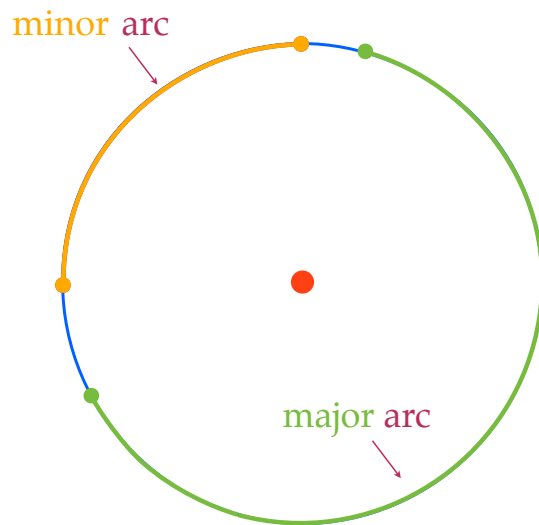# What is a Circle?

Circle - the set of all points that are the same distance from a given point.

An arc is an unbroken piece of a circle.

A minor arc is an arc that is <u>less</u> than a semicircle.

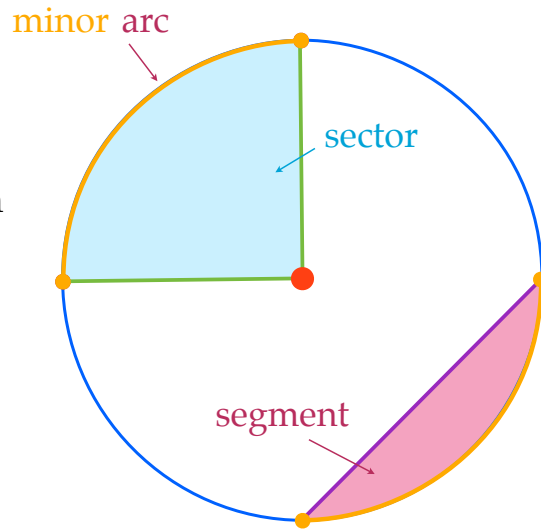A major arc is an arc that is <u>greater</u> than a semicircle.

minor arc

major arc

What is a Circle?

Circle - the set of all points that are the same distance from a given point.

A sector of a circle is the area bounded by an arc and two radii to the arc's endpoints.

A segment of a circle is the area bounded by an arc and the chord joining the arc's endpoints.
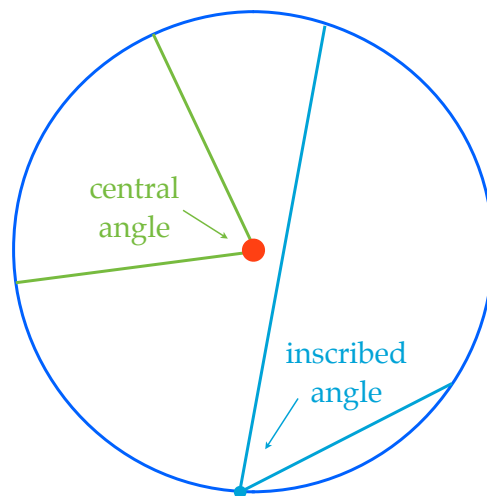
minor arc

sector

segment

What is a Circle?

Circle - the set of all points that are the same distance from a given point.

A central angle is an angle whose vertex is at the center of the circle.

An inscribed angle is an angle whose vertex is on the circle.

central angle

inscribed angle

What is a Circle?

Circle - the set of all points that are the same distance from a given point.

Inscribed - a circle is "inscribed" in a polygon if the sides of the polygon are tangent to the circle.

Circumscribed - a circle is "circumscribed" about a polygon if the vertices of the polygon are on the circle.