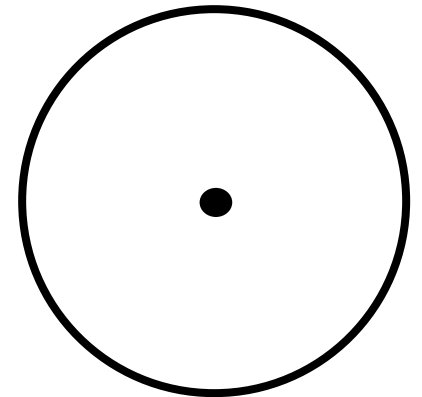


**Circles**

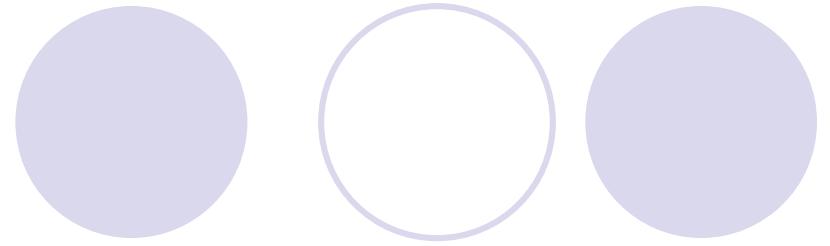
*Vocabulary*

# circle

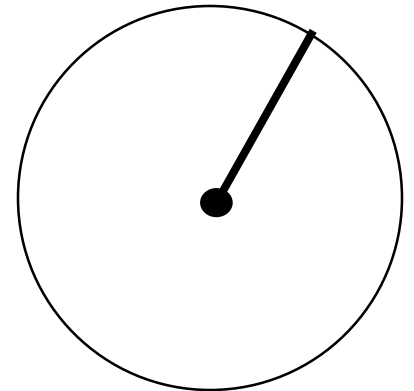
- *the set of all points in a plane that are equidistant from a given point called the center of the circle*



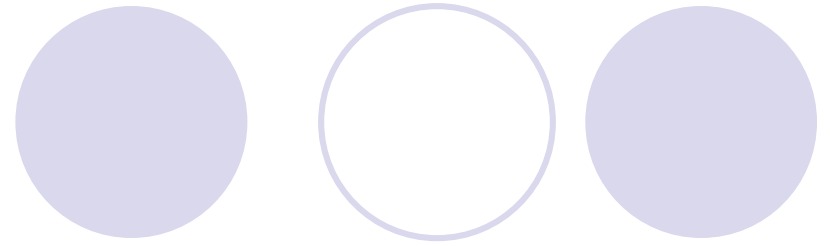
# radius



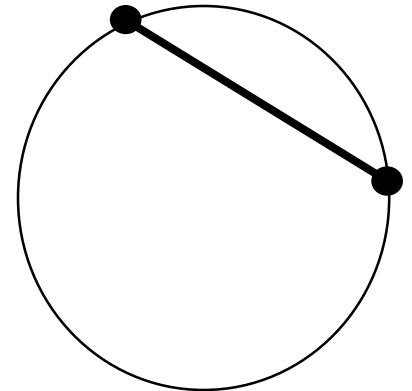
- *a segment whose endpoints are the center and any point on the circle*



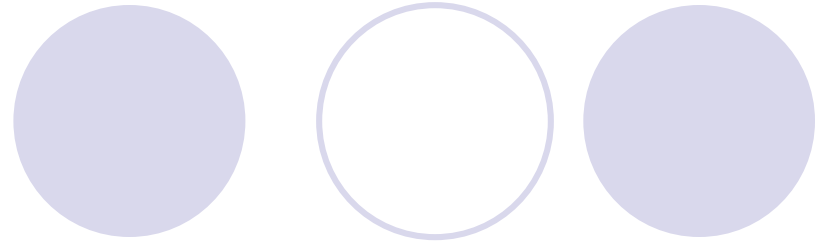
# chord



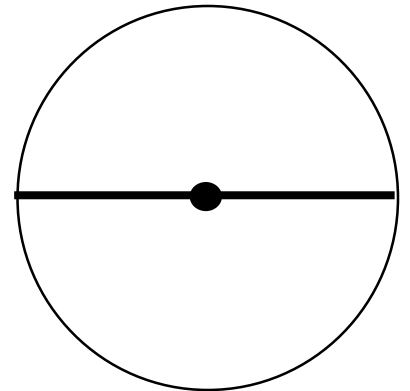
- *a segment whose endpoints are on a circle*



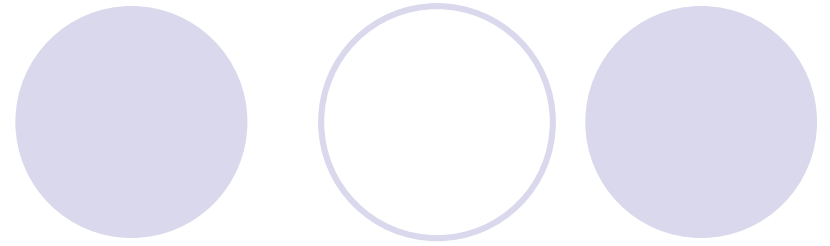
# diameter



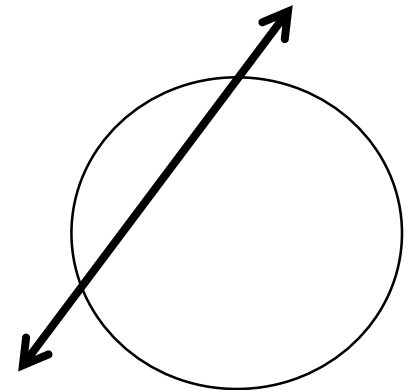
- *a chord that contains the center of a circle*



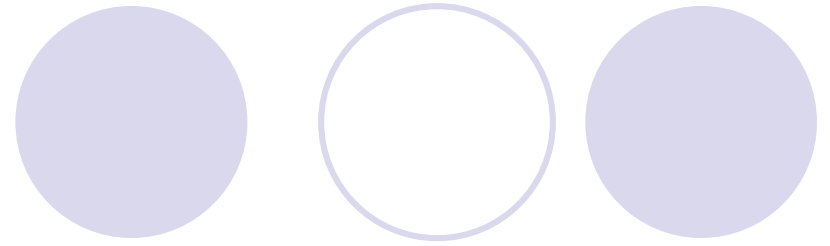
# secant



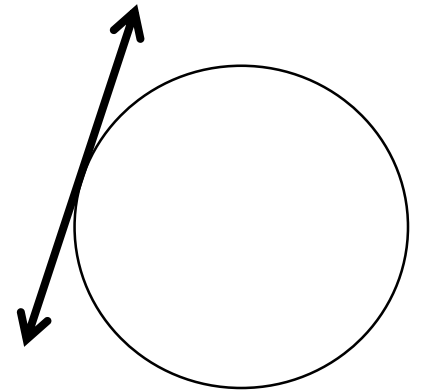
- *a line that intersects a circle in two points*



# tangent

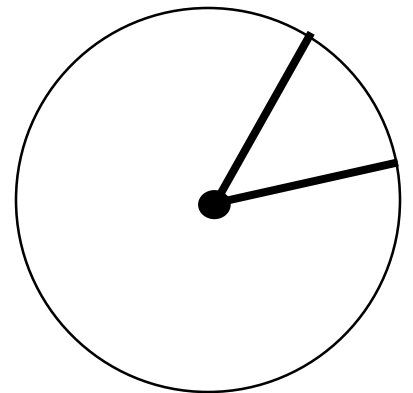


- *a line in the plane of a circle that intersects the circle in exactly one point, the **point of tangency***



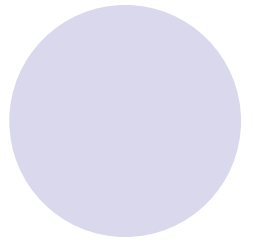
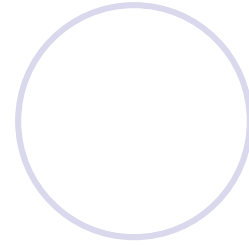
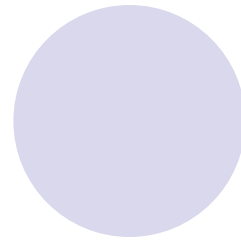
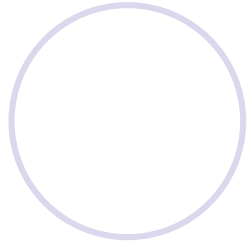
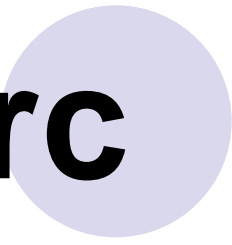
# central angle

- *an angle whose vertex is the center of the circle*

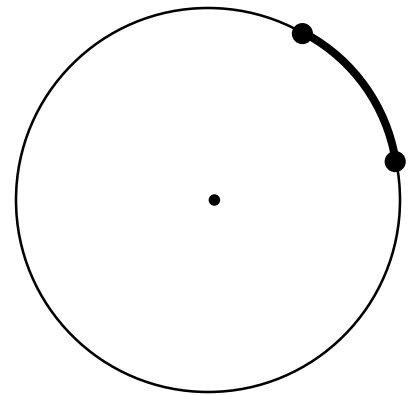




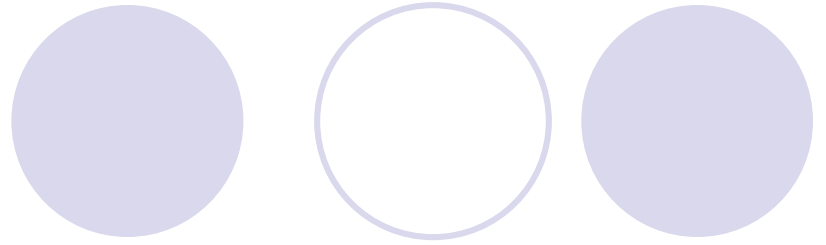
**arc**



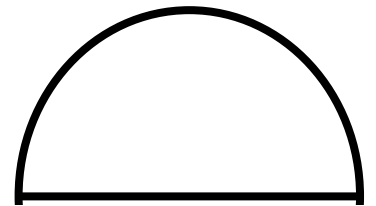
● *an unbroken part of a circle*



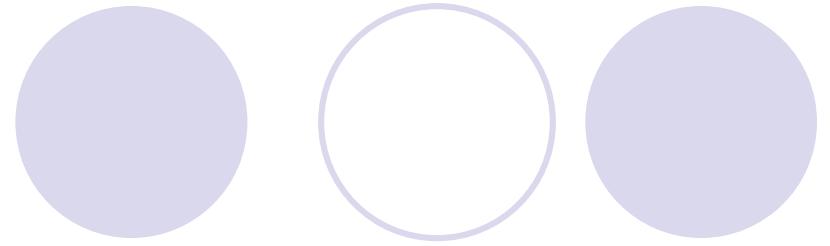
# semicircle



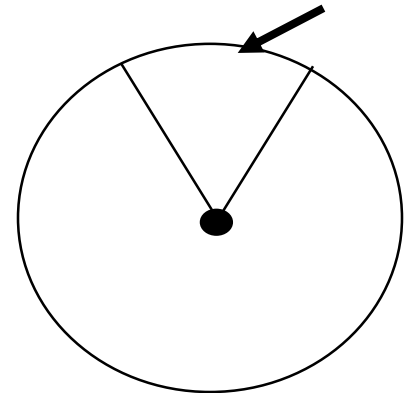
- *an arc with endpoints that are the endpoints of the diameter*



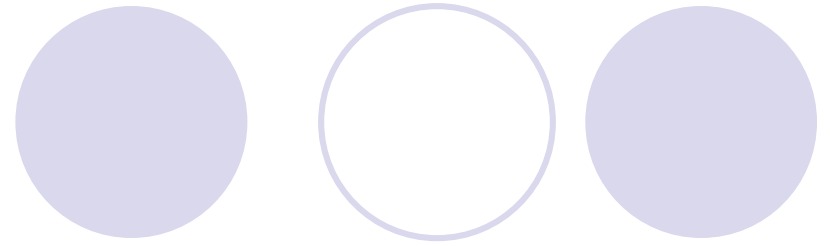
# minor arc



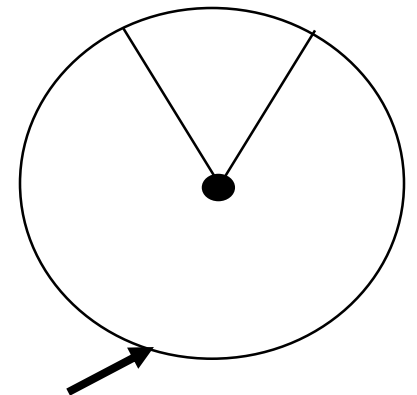
- *an arc of a circle that measures less than  $180^\circ$*



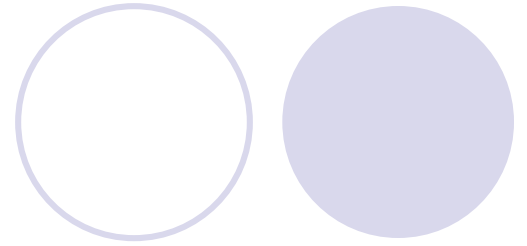
# major arc



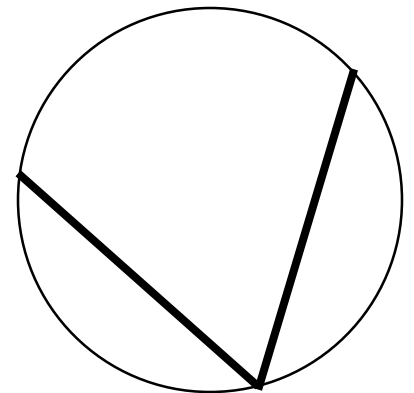
- *an arc of a circle that measures more than  $180^\circ$*



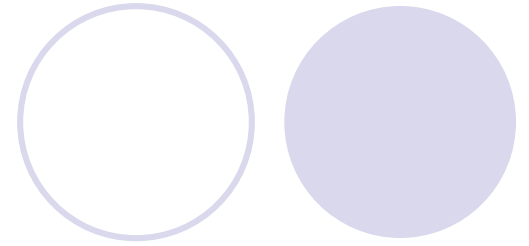
# inscribed angle



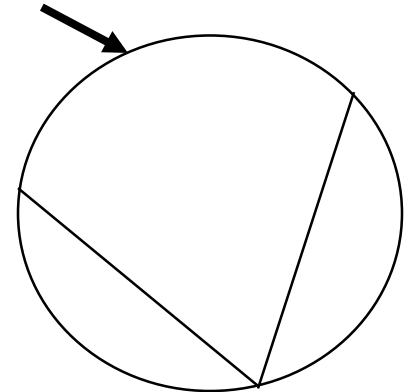
- *an angle whose vertex is on a circle and whose sides contain chords of the circle*



# intercepted arc

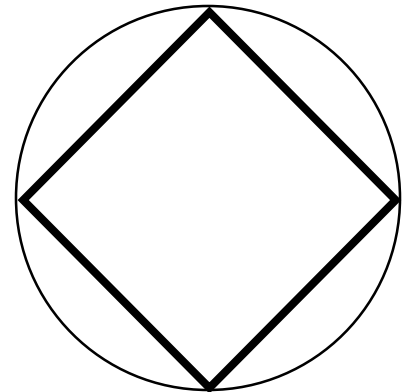


- *the arc that lies in the interior of an inscribed angle and has endpoints on the angle*

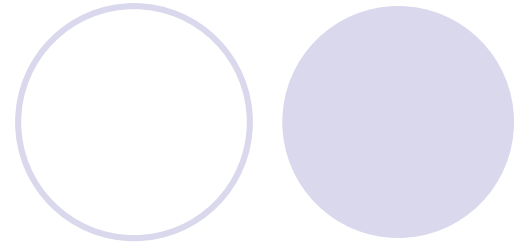


# inscribed polygon

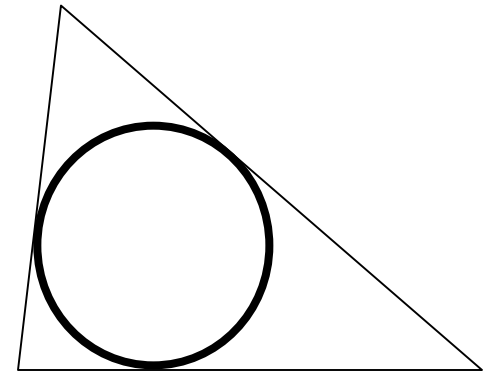
- *a polygon whose vertices lie on a circle*



# inscribed circle

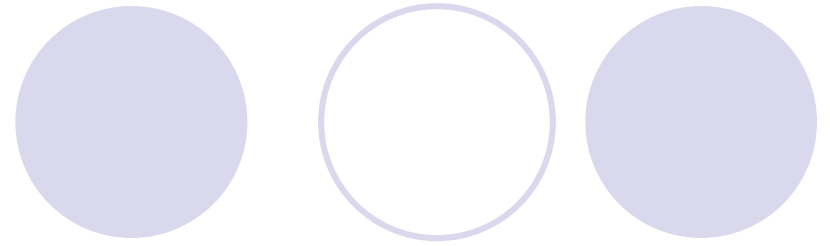


- *a circle enclosed in a polygon, where every side of the polygon is a tangent to the circle*

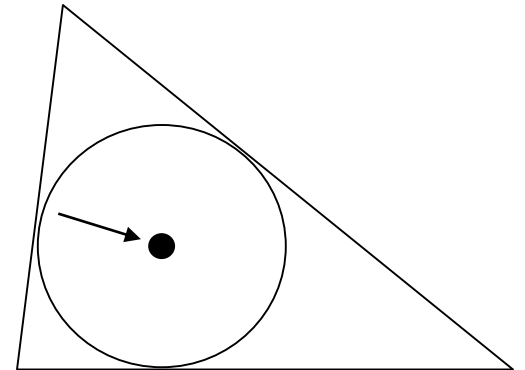




# incenter

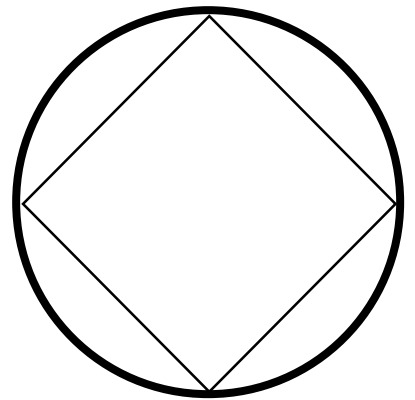


- *the center of a circle inscribed in a triangle*



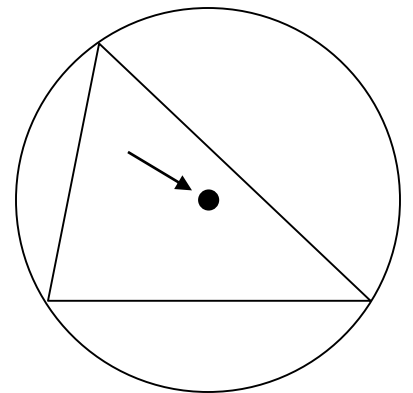
# circumscribed circle

- *the circle that contains the vertices of an inscribed polygon*



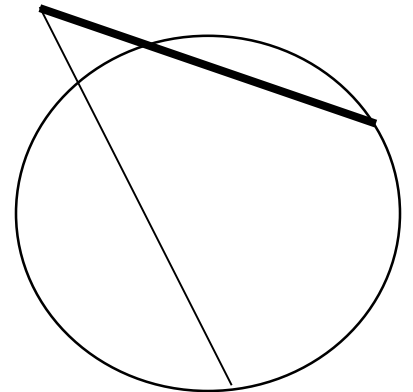
# circumcenter

- *the center of the circle circumscribed about a given triangle.*



# secant segment

- *a segment that contains a chord of a circle, and has exactly one endpoint outside the circle*



# external segment

- *the part of the secant segment that is outside the circle*

