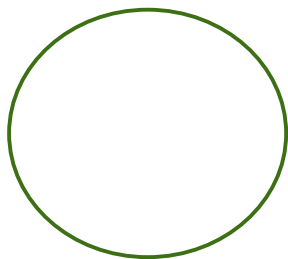


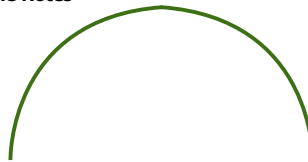
1.6 Circles (Part 1)

1. Circle Notes



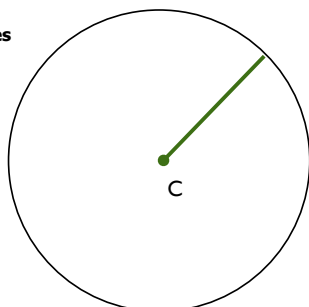
A **circle** is the set of all points in a plane at a given distance from a given point.

1. Circle Notes



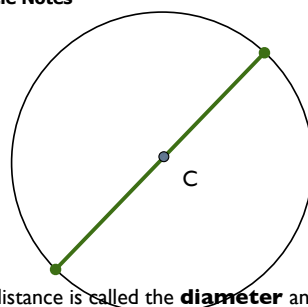
A **semicircle** is an arc of a circle whose endpoints are the endpoints of a diameter.

1. Circle Notes



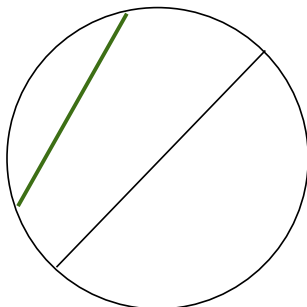
The given distance is called the **radius** and the given point is called the **center**.

1. Circle Notes



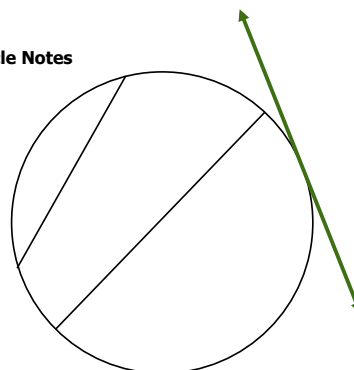
The given distance is called the **diameter** and the point is the **center**.

1. Circle Notes



A chord of a circle is a geometric line segment whose endpoints both lie on the circumference of the circle.

1. Circle Notes



Tangent is a line which touches a circle at just one point.

1. Circle Notes

A secant line is a line that (locally) intersects the circle in two points. Cord is portion of a secant

1. Circle Notes

1. Circle Notes

An **arc** of a circle is two points on the circle and a continuous (unbroken) part of the circle between the two points.

1. Classwork

Can a chord of a circle also be its diameter? Can it be a tangent? Why or why not?

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

2. Classwork

For Exercises 2–9, use the diagram at right. Points E , P , and C are collinear, and P is the center of the circle.

2. Name three chords.	3. Name one diameter.
4. Name five radii.	5. Name five minor arcs.
6. Name two semicircles.	7. Name two major arcs.
8. Name two tangents.	9. Name a point of tangency.

3. HOMEWORK