Algeo 3: 11.1 – Circles: Basic Terms

Name _____

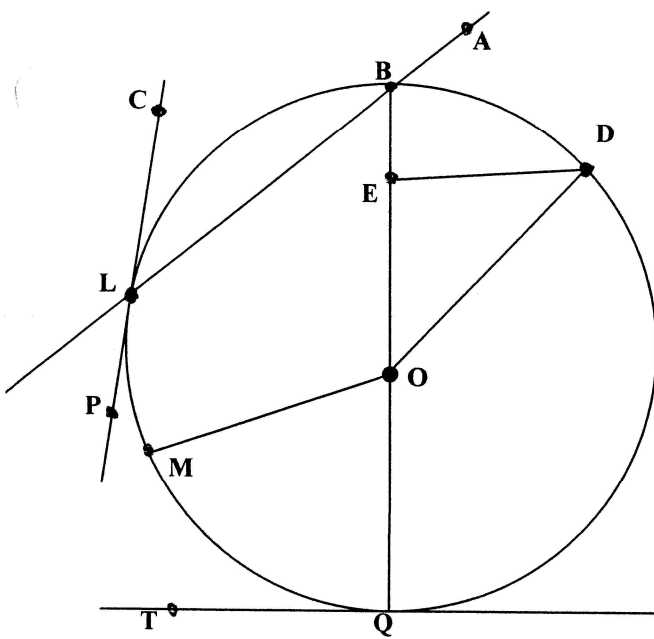**New Definitions:**

Chord: _____

Secant: _____

Tangent: _____

Point of Tangency: _____

**Question: By these definitions, is a diameter a chord? _____

Example: Use the diagram below of $\odot O$

1. Name all the radii shown. _____

2. Name all diameters. _____

3. Name all chords. _____

4. Name a secant. _____

5. Name two tangents. _____

6. Name two points of tangency. _____

7. How many secants could be drawn containing M and Q? _____

8. How many tangents could be drawn containing M and Q? _____

9. How many tangents could be drawn containing D? _____

10. Explain why $\overline{DE}$ is not a chord.

Algeo 3: 11.1 Practice Worksheet

Name _____

Complete the statement.

1. A __?__ is a line in the plane of the circle that intersects the circle in exactly one point.

   [A] chord   [B] secant

   [C] tangent   [D] none of these

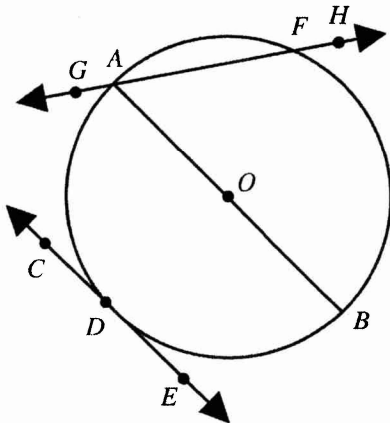   [1] _____

2. A __?__ is a segment whose endpoints are points on the circle.

   [A] chord   [B] secant
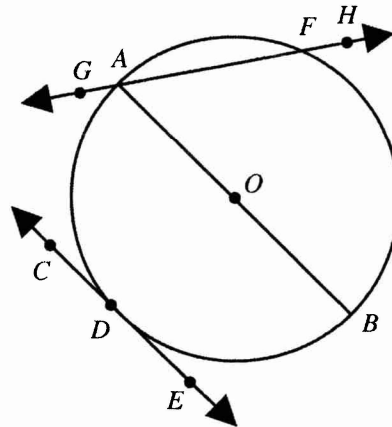
   [C] tangent   [D] none of these

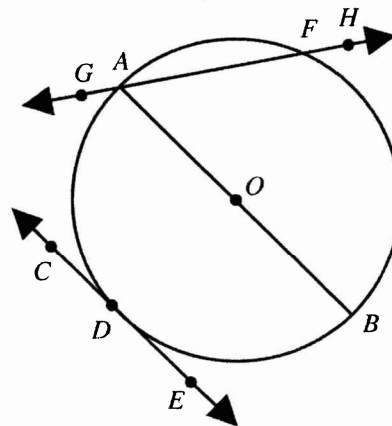   [2] _____

3. Identify all radii for circle *O*.

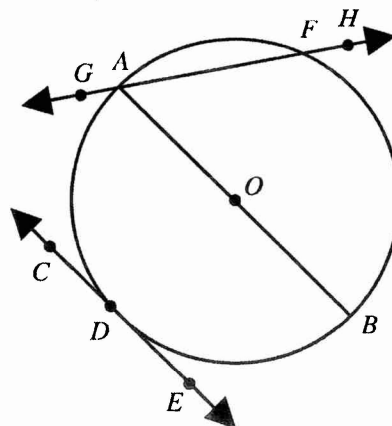[3] _____

4. Identify all secants for circle *O*.

[4] _____
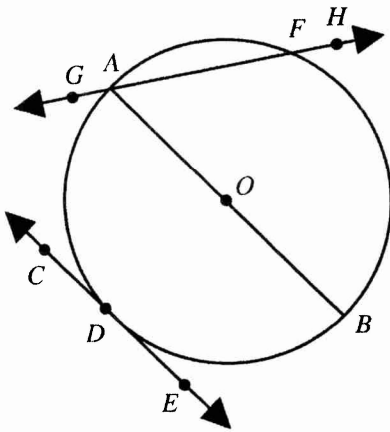
5. Identify all tangents for circle *O*.

[5] _____

6. Identify all chords for circle *O*.

[6] _____

7. Tell which word best describes the line or segment.

$\overleftrightarrow{HG}$

[A] tangent [B] radius

[C] secant [D] chord

[7] _____

8. a. Name the coordinates of the center of each circle.
b. Name the coordinates of the intersection of the two circles.
c. What is the line that is tangent to both circles? Name the coordinates of the point of tangency.
d. What is the length of the diameter of the larger circle? What is the length of the radius of the smaller circle?
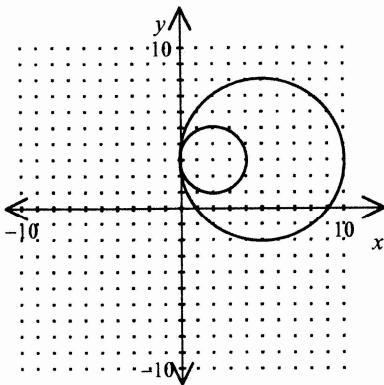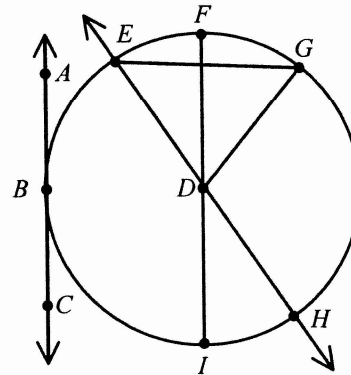

[8] _____

9. The diameter of a circle is given. Find the radius.
a. $d = 15$ cm
b. $d = 14$ ft

[A] a. 30 cm [B] a. 7.5 cm
    b. 7 ft   b. 7 ft

[C] a. 30 cm [D] a. 7.5 cm
    b. 28 ft   b. 28 ft

[9] _____

10. Identify the center, a point of tangency, a chord, a secant, a radius, and a diameter.

[10] _____

11. The radius of a circle is given. Find the diameter.
a. 17 m
b. 6.3 yd

[A] a. 8.5 m [B] a. 8.5 m
    b. 12.6 yd   b. 3.15 yd

[C] a. 34 m [D] a. 34 m
    b. 3.15 yd   b. 12.6 yd

[11] _____