

8.5

Name (print first and last) \_\_\_\_\_ Per \_\_\_\_\_ Date: 3/31 due 4/1

8.5 Angle & Arc Measures: Intersecting Secants & Tangents

Geometry Regents 2013-2014 Ms. Lomac

SLO: I can identify relationships with arc measures and intersecting secants and tangents and use them to solve problems.

(1)  Use the website link(s) for lesson 8.5 or your textbook to investigate the relationship between angles formed by intersecting secants and tangents and the arcs they intercept. Complete a sketch for each example.

Two secants, or a secant and tangent, or 2 tangents intersect a circle. Write relationships between the angle and intercepted arcs.

2 Secants

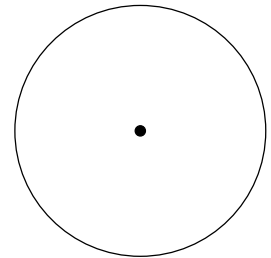
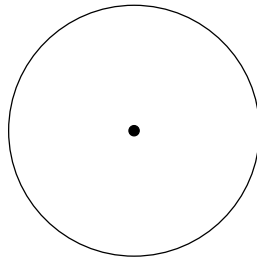
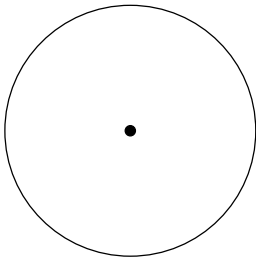
2 tangents

1 secant 1 tangent

\_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_  
angle, small arc, big arc

\_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_  
angle, small arc, big arc

\_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_  
angle, small arc, big arc



Write a sentence that summarizes the relationship between the measure of an angle formed by secants and/or tangents and the arcs intercepted by it. Include a labeled diagram and an equation showing the relationship.

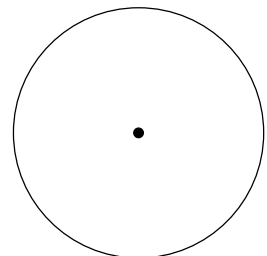
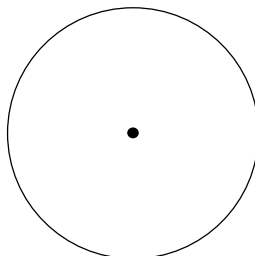
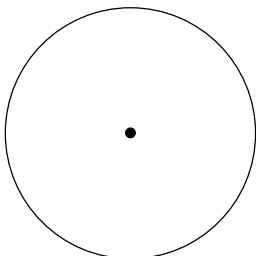
\_\_\_\_\_  
\_\_\_\_\_

Equation: \_\_\_\_\_

2 secants

1 secant 1 tangent

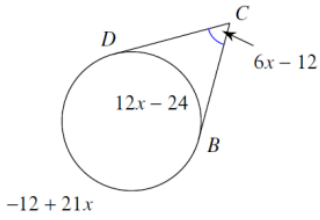
2 tangents



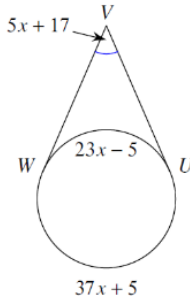
8.5

(1)  Find the variable or the indicated arc or angle measure.. \*\*\* Highlighting arcs and angles can be helpful.

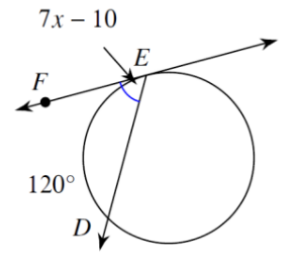
(a) Find  $m\widehat{BD}$



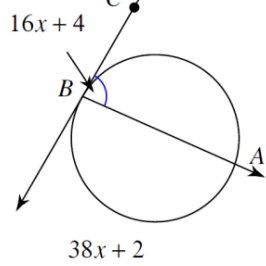
(b)



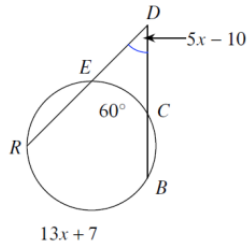
(c) the small arc disappears, so...



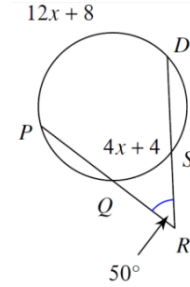
(d)



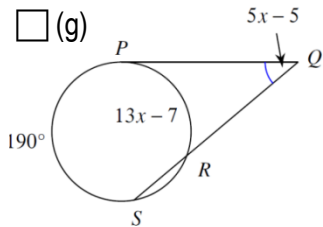
(e) Find  $m\widehat{RB}$



(f)



(g)



(h)

