Lesson 10.6 Practice: Segment Lengths in Circles

School Launch · Geometry · Unit 10: Circles · Worksheet A

Calculator allowed

Name _____ Date _____ Score _____ / 10

Show your work under each problem, one step per line, and check your answer. Word problems: name the unknown, write the equation, solve, and answer in a sentence with units.

1. Two chords intersect. One is cut into 12 and 11; the other has one piece 12. Find the other piece. EASY

2. Two chords intersect. One is cut into 11 and 9; the other has one piece 5. Find the other piece. EASY

3. Two chords intersect. One is cut into 11 and 9; the other has one piece 4. Find the other piece. EASY

4. From an external point, a secant has external part 8 and internal (chord) part 5. A tangent from the same point has length t. Find t (simplest radical form). MEDIUM

5. From an external point, a secant has external part 8 and internal (chord) part 4. A tangent from the same point has length t. Find t (simplest radical form). MEDIUM

6. From an external point, a secant has external part 4 and internal (chord) part 2. A tangent from the same point has length t. Find t (simplest radical form). MEDIUM

7. From an external point, a secant has external part 5 and internal (chord) part 9. A tangent from the same point has length t. Find t (simplest radical form). MEDIUM

8. From an external point, a secant has external part 9 and internal (chord) part 2. A tangent from the same point has length t. Find t (simplest radical form). HARD

9. From an external point, a secant has external part 8 and internal (chord) part 2. A tangent from the same point has length t. Find t (simplest radical form). HARD

10. From an external point, a secant has external part 8 and internal (chord) part 8. A tangent from the same point has length t. Find t (simplest radical form). HARD