### Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Segment Lengths – Tangents**

|  |
| --- |
| * If two segments from the same exterior point

 are tangent to a circle, then they are congruent. |

1. 

16

3x + 4

1. 

11

x2 + 2

1. 

x2  – 15

14x

1. 

3

4

x

A

1. 

3

5

7

C

B

|  |
| --- |
| * If a line (segment or ray) is tangent to a circle,

then it is perpendicular to the radius drawn tothe point of tangency. |

1. 

12

9

x

1. 

12

8

x

1. Is CB tangent to the circle?

24

16

32

C

B

A

1. 

24

16

1. A green on a golf course is in the shape of a circle. Your golf

ball is 8 feet from the edge of the green and 32 feet from a

point of tangency on the green.

* 1. 
	2. How far is your ball from the cup at the center? \_\_\_\_\_\_\_\_\_\_