$\qquad$ Date: $\qquad$

## Segment Lengths - Tangents

it If two segments from the same exterior point are tangent to a circle, then they are congruent.


1. $x=$ $\qquad$

2. $x=$ $\qquad$
3. $x=$ $\qquad$

4. $x=$ $\qquad$

5. $A B=$ $\qquad$

$\star$ If a line (segment or ray) is tangent to a circle, then it is perpendicular to the radius drawn to the point of tangency.


| 6. $x=$ $\qquad$ 12 | 7. $\mathrm{x}=$ |
| :---: | :---: |

8. Is CB tangent to the circle?
9. $r=$ $\qquad$

10. A green on a golf course is in the shape of a circle. Your gc ball is 8 feet from the edge of the green and 32 feet from a point of tangency on the green.
a. $r=$ $\qquad$

b. How far is your ball from the cup at the center? $\qquad$
