

Name -----

Class -----

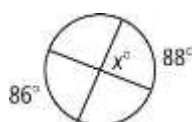
Date -----

HW-51

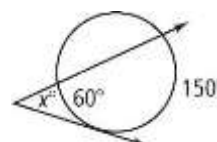
Angle Measures and Segment Lengths

Find the value of x .

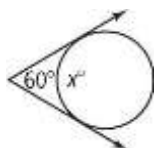
1.



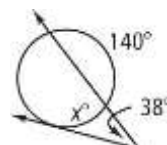
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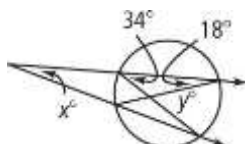


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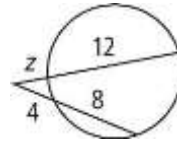


Find the value of each variable using the given chord, secant, and tangents.
If the answer is not a whole number, round to the nearest tenth.

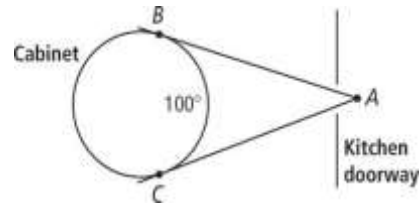
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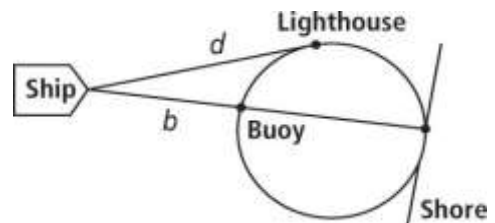
6.



7. The distance from your ship to a lighthouse is d , and the distance to the buoy is b . Express the distance to the shore in terms of d and b .



8. There is a circular cabinet in the dining room. Looking in from another room at point A , you estimate that you can see an arc of the cabinet of about 100° . What is the measure of $\angle A$ formed by the tangents to the cabinet?



9. If three tangents to a circle form an equilateral triangle, prove that the tangent points form an equilateral triangle inscribed in the circle.

