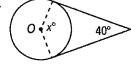
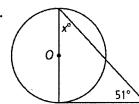
Quadrilaterals, Circles and Arcs - Day 4 Tangent Lines and Inscribed Angles

Algebra Assume that lines that appear to be tangent are tangent. O is the center of each circle. What is the value of x?

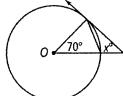
1.



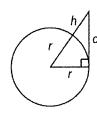
2.



3.



The circle at the right represents Earth. The radius of the Earth is about 6400 km. Find the distance d that a person can see on a clear day from each of the following heights h above Earth. Round your answer to the nearest tenth of a kilometer.



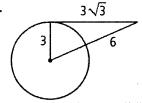
4. 12 km

**5**. 20 km

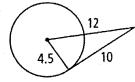
6. 1300 km

Determine whether a tangent line is shown in each diagram. Explain.

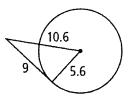
10.



11.

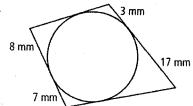


12.

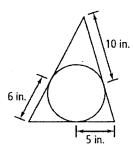


Each polygon circumscribes a circle. What is the perimeter of each polygon?

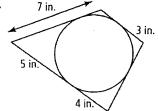
14.



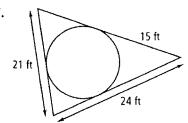
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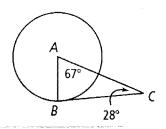
16.



17.

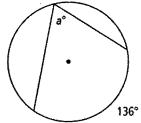


**18. Error Analysis** A classmate states that  $\overline{BC}$  is tangent to  $\bigcirc A$ . Explain how to show that your classmate is wrong.

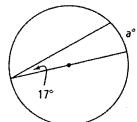


Find the value of each variable. For each circle, the dot represents the center.

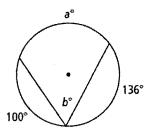
1.



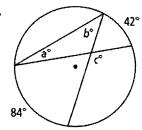
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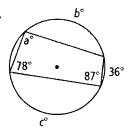
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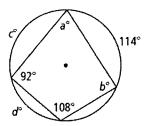
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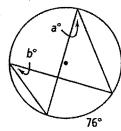
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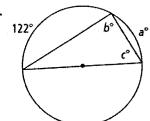
6.



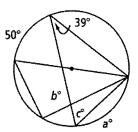
7.



8.



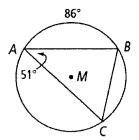
9



Find each indicated measure for  $\odot M$ .

13. a.  $m \angle B$  c.  $\widehat{mBC}$ 

- **b**.  $m \angle C$
- $d. \widehat{mAC}$



**18. Error Analysis** A classmate says that  $m \angle E = 90$ . Explain why this is incorrect.

