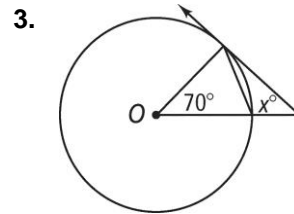
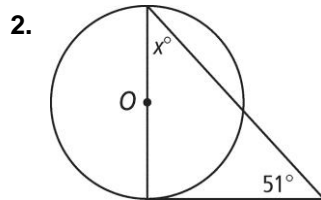
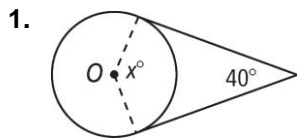


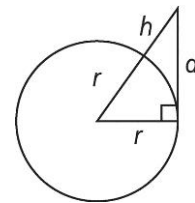


12-1 Tangent Lines

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



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.

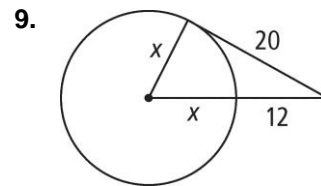
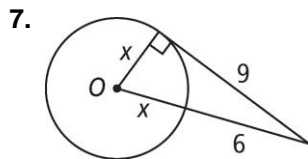


4. 12 km

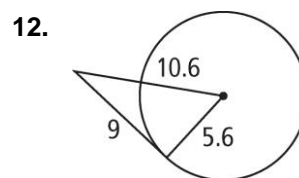
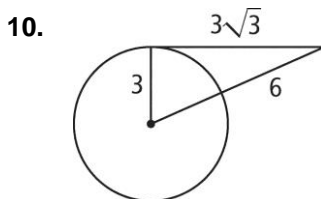
5. 20 km

6. 1300 km

In each circle, what is the value of x to the nearest tenth?



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



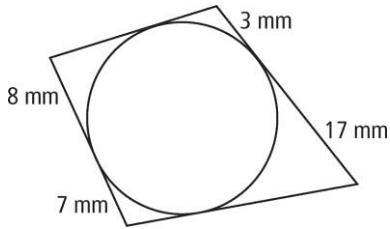
12-1 Practice (continued)

Tangent Lines

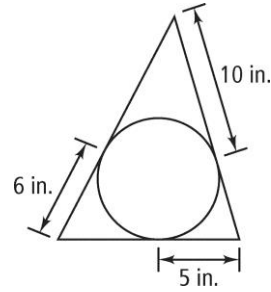
Form G

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

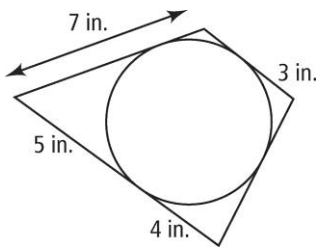
14.



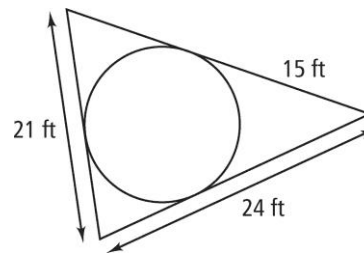
15.



16.



17.



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

