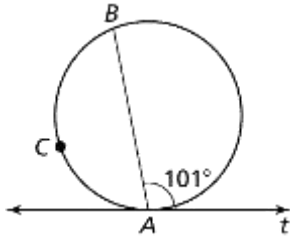


# HW 10.5

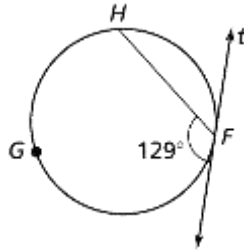
## Angle Relationships in Circles

In Exercises 1–3, line  $t$  is tangent to the circle. Find the indicated measure.

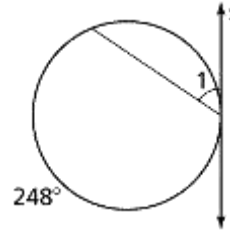
1.  $m\widehat{AB}$



2.  $m\widehat{FH}$

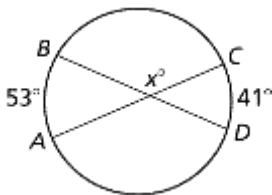


3.  $m\angle 1$

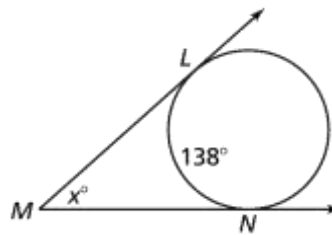


In Exercises 4–7, find the value of  $x$ .

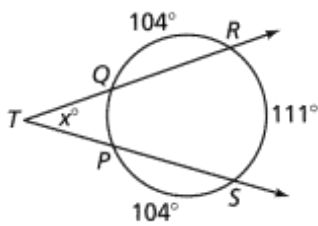
4.



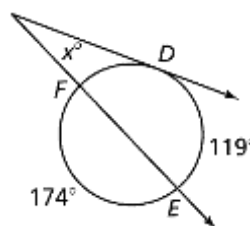
5.



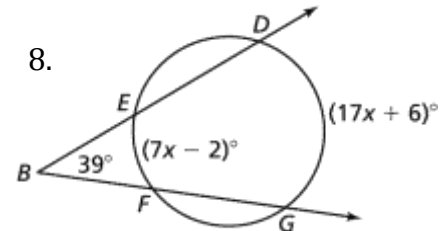
6.



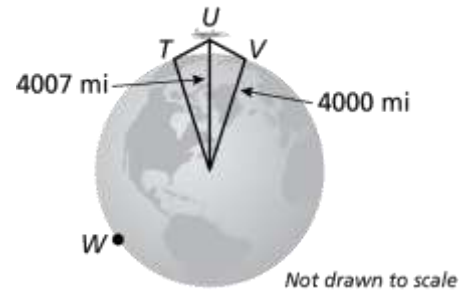
7.



8.



9. A plane at point  $U$  is flying at an altitude of 7 miles above Earth. What is the measure of arc  $TV$  that represents the part of Earth you can see from the airplane? The radius of Earth is about 4000 miles.



10. Parallel light rays enter the eye and are bent by the lens to converge at a single point on the retina called the *focal point*. When a person is farsighted, the rays converge behind the retina, as shown in the diagram. When  $m\angle XY = 52^\circ$  and  $m\angle WZ = 10^\circ$ , find the measure of angle  $F$ .

