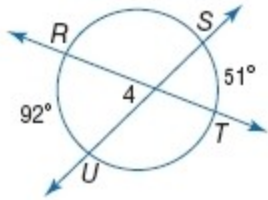


## 11-6 Secants, Tangents, and Angle Measures

Find each measure. Assume that segments that appear to be tangent are tangent.

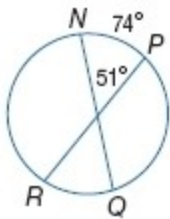
9.  $m\angle 4$



ANSWER:

71.5

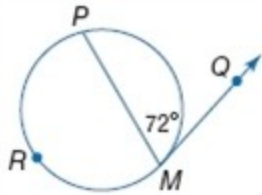
11.  $m\widehat{RQ}$



ANSWER:

28

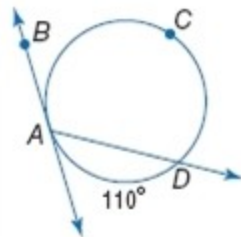
13.  $m\widehat{PM}$



ANSWER:

144

15.  $m\angle DAB$

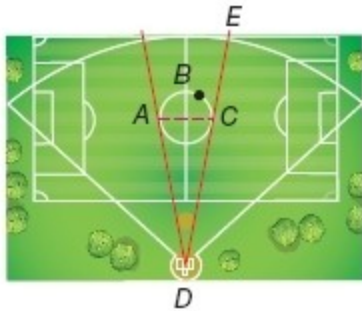


ANSWER:

125

## 11-6 Secants, Tangents, and Angle Measures

17. **SPORTS** The multi-sport field shown includes a softball field and a soccer field. If  $m\widehat{ABC} = 200$ , find each measure.



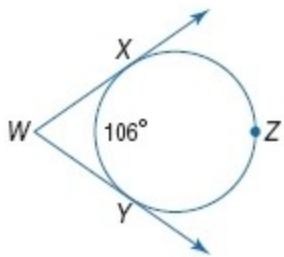
- $m\angle ACE$
- $m\angle ADC$

ANSWER:

- 100
- 20

**CCSS STRUCTURE** Find each measure.

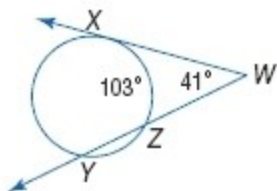
19.  $m\angle W$



ANSWER:

74

21.  $m\widehat{XY}$

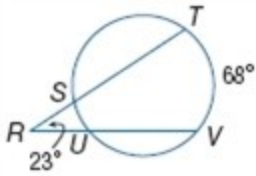


ANSWER:

185

**11-6 Secants, Tangents, and Angle Measures**

23.  $m\widehat{SU}$



ANSWER:

22

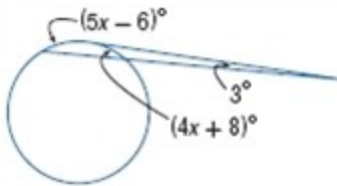
25. **SPACE** A satellite orbits above Earth's equator. Find  $x$ , the measure of the planet's arc, that is visible to the satellite.



ANSWER:

168

**ALGEBRA** Find the value of  $x$ .



27.

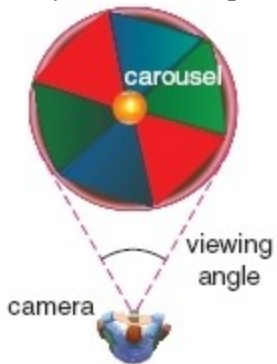
ANSWER:

20

## 11-6 Secants, Tangents, and Angle Measures

29. **PHOTOGRAPHY** A photographer frames a carousel in his camera shot as shown so that the lines of sight form tangents to the carousel.

- If the camera's viewing angle is  $35^\circ$ , what is the arc measure of the carousel that appears in the shot?
- If you want to capture an arc measure of  $150^\circ$  in the photograph, what viewing angle should be used?



**ANSWER:**

- 145
- 30