

5.  $98^\circ$

6.  $142^\circ$

7.  $83^\circ$

8.  $97^\circ$

9.  $144^\circ$

10.  $110^\circ$

11.  $53^\circ$

12.  $55^\circ$

13.  $33^\circ$

14.  $74^\circ$

15.  $90^\circ$

16.  $47^\circ$

**PRACTICE**

For Exercises 22–25, find each measure in  $\odot P$ .

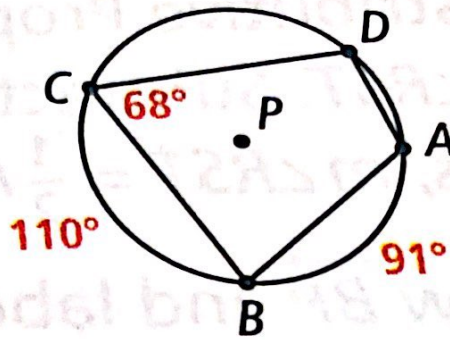
SEE EXAMPLES 1 AND 2

22.  $m\widehat{AD} = 45^\circ$

23.  $m\widehat{BDC} = 250^\circ$

24.  $m\angle ADC = 100.5^\circ$

25.  $m\angle BAD = 112^\circ$

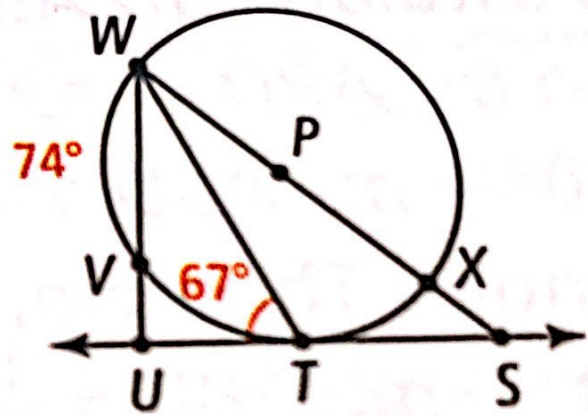


For Exercises 26–28,  $\overleftrightarrow{SU}$  is tangent to  $\odot P$  at point T. Find each measure. SEE EXAMPLES 2 AND 3

26.  $m\widehat{TVW} = 134^\circ$

27.  $m\angle TWX = 23^\circ$

28.  $m\angle TWV = 30^\circ$



For Exercises 29–31,  $\overleftrightarrow{HK}$  is tangent to  $\odot C$  at point J. Find each measure. SEE EXAMPLES 3 AND 4

29.  $m\angle KJM = 69^\circ$

30.  $m\angle MJN = 48^\circ$

31.  $m\angle HJN = 63^\circ$

