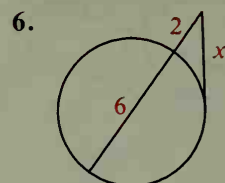
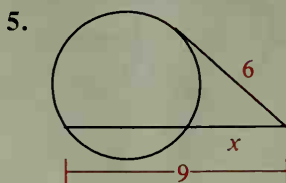
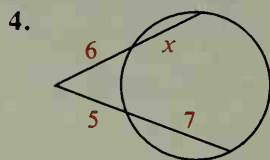


Chords, secants, and tangents are shown. State the equation you would use to find the value of  $x$ . Then solve for  $x$ .



7. Supply reasons to complete the proof of Theorem 9-12.

Given:  $\overline{PA}$  and  $\overline{PC}$  drawn to the circle from point  $P$

Prove:  $r \cdot s = t \cdot u$

**Proof:**

1. Draw chords  $\overline{AD}$  and  $\overline{BC}$ .

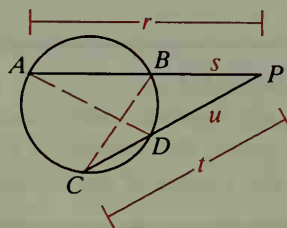
2.  $\angle A \cong \angle C$

3.  $\angle P \cong \angle P$

4.  $\triangle APD \sim \triangle CPB$

$$5. \frac{r}{t} = \frac{u}{s}$$

$$6. r \cdot s = t \cdot u$$



## Written Exercises

Chords, secants, and tangents are shown. Find the value of  $x$ .

