

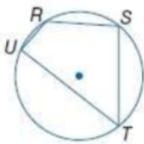
Key HW 4 p673-675 Geo C9

- 11.  $162^\circ$
- 12.  $46^\circ$
- 13.  $70^\circ$
- 14.  $48^\circ$
- 15.  $140^\circ$
- 16.  $66^\circ$
- 17.  $32^\circ$
- 18.  $34^\circ$
- 19.  $20^\circ$
- 20.  $47^\circ$

21. paragraph proof

**Given:**  $m\angle T = \frac{1}{2}m\angle S$

**Prove:**  $m\widehat{TUR} = 2(m\widehat{URS})$



**ANSWER:**

Proof: Given  $m\angle T = \frac{1}{2}m\angle S$  means that

$m\angle S = 2m\angle T$ . Since  $m\angle S = \frac{1}{2}m\widehat{TUR}$  and

$m\angle T = \frac{1}{2}m\widehat{URS}$ , the equation becomes

$\frac{1}{2}m\widehat{TUR} = 2\left(\frac{1}{2}m\widehat{URS}\right)$ . Multiplying each side of the

equation by 2 results in  $m\widehat{TUR} = 2m\widehat{URS}$ .

Key HW 4 p673-675 #11-21all, 23-26all, 28-36even (20) Geo C9

- 23.  $30^\circ$
- 24.  $60^\circ$
- 25.  $12.75^\circ$
- 26.  $51.75^\circ$
- 28.  $80^\circ$
- 30.  $93^\circ$
- 32.  $135^\circ$
- 34.  $112.5^\circ$
- 36. a.  $36^\circ$
- b.  $60^\circ$
- c.  $\frac{180^\circ}{7}$  or about  $25.7^\circ$
- d.  $45^\circ$
- 9. 70
- 10. 4.29
- 11.  $x = 16; 41$
- 12. 46
- 13. 85
- 14. B
- 15.  $14\sqrt{2}$  in.  
 $\approx 19.80$  in