

7.3 HW Key

- 1) 122°
- 2) 90°
- 3) 22
- 4) 115°
- 5) 80°
- 6) 180°
- 7) 1
- 8) 10
- 9) 4
- 10) 9
- 11) 4
- 12) 6
- 13) \overline{PQ} & \overline{RS} are equidistant from the center of the circle so they are \cong by the theorem "in the same circle or in \cong circles, 2 chords are \cong iff they are equidistant from the center". Since they are \cong , they must have the same length.
- 14)
 - 1) given
 - 2) $\angle AED \cong \angle AEB$
 - 3) diam $\odot \perp$ to chord \rightarrow diam bis. chord & arc
 - 4) reflex prop
 - 5) SAS \cong
 - 6) $\overline{AD} \cong \overline{AB}$
 - 7) In \cong \odot 's, 2 min arcs \cong iff corr chords \cong .

- 15) 1) Given
 2) $\overline{PT} \cong \overline{QS}$
 3) def of radius
 4) SSS \cong

USN WH E.F

1) 15°

2) 30°

3) 45°

4) 60°

5) 75°

6) 90°

7) 105°

8) 120°

9) 135°

10) 150°

11) 165°

12) 180°

13) \overline{PR} & \overline{RS} are equidistant from the center of the circle so they are \cong by the theorem "in the same circle or in \cong circles, chords are \cong iff they are equidistant from the center". Since they are \cong , their radii must have the same length.

14) 1) Given

2) $\triangle AED \cong \triangle AEB$

3) draw \perp to chord \rightarrow draw bis chord \overline{AB}

4) reflex prop

5) $\angle AED \cong \angle AEB$

6) $\overline{AD} \cong \overline{AB}$

7) In $\triangle AED$ & $\triangle AEB$ we have $\angle AED \cong \angle AEB$ (reflex prop) \cong