

p. 151 Mixed Review #11

G:  $\overline{BE} \cong \overline{CD}$ ;  $\overline{BD} \cong \overline{CE}$

P:  $\triangle ABC$  is isosceles

S	R
① $\overline{BE} \cong \overline{CD}$ ; $\overline{BD} \cong \overline{CE}$	① Given
② $\overline{BC} \cong \overline{BC}$	② Refl. prop. of $\cong$
③ $\triangle BEC \cong \triangle CDB$	③ SSS $\cong$ Post
④ $\angle ECB \cong \angle DCB$	④ CPCTC
⑤ $\overline{AB} \cong \overline{AC}$	⑤ Base's Thm
⑥ $\triangle ABC$ is Isosceles	⑥ Def. of Isos. $\triangle$

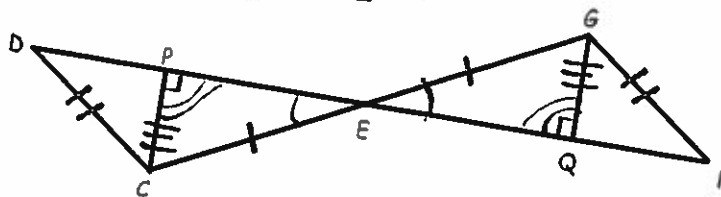
Given:  $\angle 1 \cong \angle 2, \angle 3 \cong \angle 4$

Prove:  $\overline{TU} \cong \overline{TW}$

Statement	Reasons
1 $\angle 1 \cong \angle 2, \angle 3 \cong \angle 4$	Given
2 $\overline{SV} \cong \overline{SV}$	Ref. Prop. of $\cong$
3 $\triangle USV \cong \triangle WSV$	ASA $\cong$ Post.
4 $\overline{VW} \cong \overline{VU}$	CPCTC
5 $\overline{TU} \cong \overline{TU}$	Ref. Prop. of $\cong$
6 $\triangle TWU \cong \triangle TUV$	SAS $\cong$ Post.
7 $\overline{TU} \cong \overline{TU}$	CPCTC

Given:  $\overline{CE} \cong \overline{GE}, \overline{DC} \cong \overline{FG}, \overline{CP} \perp \overline{DE}, \overline{GQ} \perp \overline{EF}$

Prove:  $\angle D \cong \angle F$



Statement	Reasons
1 $\overline{CE} \cong \overline{GE}, \overline{DC} \cong \overline{FG}, \overline{CP} \perp \overline{DE}, \overline{GQ} \perp \overline{EF}$	Given
2 $\angle DEC \cong \angle FEG$	Vert $\angle$ s Thm
3 $\angle CPE$ and $\angle GQE$ are Rt $\angle$ s	Def. of $\perp$
4 $\angle CPE \cong \angle GQE$	Rt. $\angle$ s Thm
5 $\triangle PCE \cong \triangle QGE$	AAS $\cong$ Thm
6 $\overline{PC} \cong \overline{QG}$	CPCTC
7 $\triangle DPC \cong \triangle FQG$	HL $\cong$ Thm
8 $\angle D \cong \angle F$	CPCTC

### Assignment #35

Part I: p. 146 Self-Test 2 #1-5  
(2-column Proofs for 4,5)

Part II: p. 148-150 WE #1-4, 7-12  
(2-column Proofs)

Update your Chapter 4 Study Guide