Chapter 4 Review
Homework Answers
Pg 223 - #1-5
Pg 236 - #1-16

Pg 223

1) $\overline{PR} \cong \overline{SQ}; \angle P \cong \angle S; \angle PRQ \cong \angle SQR$

2) a) Isosceles Δ
b) $\cong$
c) Converse of the Isosceles Δ Theorem

3) $\Delta AED; \angle EAB \cong \angle EDC$ (Given)
$\Delta EBC; \angle EBC \cong \angle ECB$ (Suppl. of $\cong \angle$'s are $\cong$)

4) HL

5) $\Delta GTW \cong \Delta SWT$ by SAS since:
$\overline{WT} \cong \overline{WT}, \angle WTG \cong \angle TWS, \& \overline{GT} \cong \overline{SW}.$
So $\overline{GW} \cong \overline{ST}$ by CPCTC.

Pg 236

1) $\Delta PAY \cong \Delta APL$

2) $\Delta ONE \cong \Delta OSE$

3) SAS

4) HL

5) Not Possible

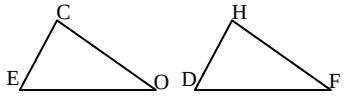
6) SSS

7) ASA

8) AAS

9) Answers may vary…sample:
The corr. sides of the 2 Δ's may not be $\cong$.

10) Pictures may vary…sample:



Angles	Sides
$\angle C \cong \angle H$	$\overline{CE} \cong \overline{HD}$
$\angle E \cong \angle D$	$\overline{CO} \cong \overline{HF}$
$\angle O \cong \angle F$	$\overline{EO} \cong \overline{DF}$

11) No; the lengths may be different.

12) 36

13) $\angle ATG \cong \angle SGT$ (alt. int. $\angle$'s since $\overline{AT} \parallel \overline{GS}$)
$\overline{AT} \cong \overline{GS}$ (Given)
$\overline{GT} \cong \overline{GT}$ (Reflexive POC)
$\Delta GAT \cong \Delta TSG$ (SAS)

14) $\angle OLN \cong \angle MLN \& \angle ONL \cong \angle MNL$
since $\overline{LN}$ bisects $\angle OLM \& \angle ONM$
$\overline{LN} \cong \overline{LN}$ by Reflexive POC
$\Delta OLN \cong \Delta MLN$ by ASA

15) $\Delta CFE \cong \Delta DEF; SSS$

16) $\Delta TQS \cong \Delta TRA; SAS$