Lesson 4.7

Homework Answers

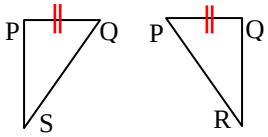
Pg 226 - #1-6, 9-14, 23, 24, 28, 34, 36, 38, 43, 45, 47

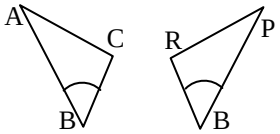
Pg 232 - #1-4

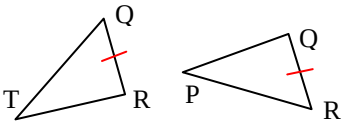
1) $\angle M$

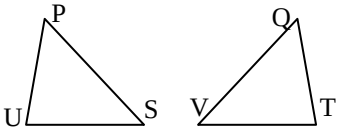
2) $\overline{DF}$

3) $\overline{XY}$

4) 

5) 

6) 

9) 

10) a) Given b) Reflexive POC
c) Given d) AAS e) CPCTC

11) $\Delta LQP \cong \Delta PML$;HL

12) $\Delta RST \cong \Delta UTS$;SSS

13) $\Delta QDA \cong \Delta UAD$;SAS

14) $\Delta QPT \cong \Delta RUS$;AAS

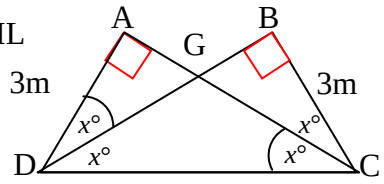
23) $\Delta ACE \cong \Delta BCD$ by ASA;
$\overline{AC} \cong \overline{BC}$, $\angle A \cong \angle B$ (Given)
$\angle C \cong \angle C$ (Reflexive POC)
$\Delta ACE \cong \Delta BCD$ (ASA)

24) $\Delta WYX \cong \Delta ZXY$ by HL
$\overline{WY} \perp \overline{YX}, \overline{ZX} \perp \overline{YX}$ (Given)
$\overline{WX} \cong \overline{ZY}$ (Given)
$\angle WYX$ & $\angle ZXY$ are rt $\angle$'s (defn of $\perp$)
$\overline{XY} \cong \overline{XY}$ (Reflexive POC)
$\Delta WYX \cong \Delta ZXY$ (HL)

28) a) Given
b) Defn. of $\perp$
c) Defn. of rt. Δ
d) Given
e) $\overline{BC} \cong \overline{BC}$
f) Reflexive POC
g) HL
h) CPCTC
i) DEC
j) Vert. $\angle$'s are $\cong$
k) AAS
l) $\overline{AE} \cong \overline{DE}$
m) CPCTC

34) C

36) A

38) a) HL
b) 

c) $x = 30$. In ΔADC,
$m\angle A + m\angle ADC + m\angle ACD = 180$.
Substituting, $90 + x + x + x = 180$.
Solving, $x = 30$.
d) 120; it is suppl. to a 60° $\angle$
e) 6m; $DC = 2(AD)$

43) $y - 5 = 1(x - 0)$

45) $y - 0 = -\frac{1}{3}(x - 0)$

47) $y + 5 = \frac{5}{3}(x - 3)$

Pg. 232

1) D; quadrilateral may not be regular.

2) A; $x = 10$

3) D; triangles many not be equilateral.

4) B; $x = 70$, $y = 72.5$