Section 3.2  Page 157 (4-16, 22-26, 28, 30, 38, 41, 42)

4) 65° - Vertical Angles Congruence Theorem
5) 110° - Alternate Exterior Angles Theorem
6) 71° - Alternate Interior Angles Theorem
7) 63° - Consecutive Interior Angles Theorem
8) 54° - Alternate Exterior Angles Theorem
9) Corresponding Angles Postulate
10) Alternate Interior Angles Theorem
11) Alternate Interior Angles Theorem
12) Consecutive Interior Angles Theorem
13) Alternate Exterior Angles Theorem
14) Corresponding Angles Postulate
15) Alternate Exterior Angles Theorem
16) Consecutive Interior Angles Theorem
22) \( m\angle 1 = 100, \ m\angle 2 = 80, \ m\angle 3 = 100 \)
23) \( m\angle 1 = 90, \ m\angle 2 = 115, \ m\angle 3 = 65 \)
24) \( m\angle 1 = 47, \ m\angle 2 = 133, \ m\angle 3 = 47 \)
25) \( \angle BAC \text{ and } \angle DCA; \angle ABD \text{ and } \angle CDB \)
26) \( \angle BAD \text{ and } \angle ABC; \angle CDA \text{ and } \angle DCB \)
28) \( x=45, \ y=20 \)
30) \( x=20, \ y = 10 \)
38) a) \( \angle 4, \ \angle 5, \ \angle 8 \)  b) 70°
41) Statements          Reasons
1) n∥ p                   1) Given
2) ∠1 ≅ ∠3                2) Alternate Interior Angles Theorem
3) m∠1 = m∠3             3) Definition of congruent
4) m∠2 + m∠3 = 180       4) Definition of supplementary angles
5) m∠2 + m∠1 = 180       5) Substitution
6) ∠1 and ∠2 are supplementary 6) Definition of supplementary angles

42) Statements          Reasons
1) t⊥ r; r || s         1) Given
2) ∠1 is a right angle  2) Definition of perpendicular lines
3) ∠1 ≅ ∠2              3) Corresponding Angles Postulate
4) ∠2 is a right angle  4) Substitution
5) t⊥ s                  5) Definition of perpendicular lines

Grading Scale
0 incorrect = 10
1-2 incorrect = 9
3-4 incorrect = 8
5-6 incorrect = 7
7-8 incorrect = 6
9-11 incorrect = 5