WARM UP

- Answer True or False

1. If 2 complementary $\angle$s are $\cong$, then each is a right $\angle$ FALSE

2. If m$\angle$Q = 100°, then $\angle$Q has no complement TRUE

3. The supplement of an obtuse $\angle$ is acute. TRUE

4. If 2 $\angle$s are complementary, they are both acute $\angle$s TRUE

PAP Geometry – Chapter 2

Section 2.4: Congruent Supplements and Complements

Objective

- Prove angles are congruent by means of 4 new theorems

Definitions from 2.2

- Complementary ∠s ⇔ sum of 2 ∠s is 90° or right angle

- *2 ∠s are adjacent and comp. ⇔ the ∠s form a right ∠*

- Supplementary ∠s ⇔ sum of 2 ∠s is 180° or straight angle

- *2 ∠s are adjacent and supp. ⇔ the ∠s form a straight ∠*

Theorems

- **Theorem 4**
  2 ∠s are supp. to the same ∠ → the 2 ∠s are ≅

- **Theorem 5**
  2 ∠s are supp. to ≅ ∠s → the 2 ∠s are ≅

- **Theorem 6**
  2 ∠s are comp. to the same ∠ → the 2 ∠s are ≅

- **Theorem 7**
  2 ∠s are comp. to ≅ ∠s → the 2 ∠s are ≅