**2.7 Angle Relationships**

**Right Angle Congruence Thorem:**

**All right angles are congruent.**

**Abbreviation:**

**Proof:**

**Given: <1 and < 2 are right angles**

**Prove: <1 = <2**

**Congruent Supplements Theorem:**

**If 2 angles are supplementary to the same angle (or to congruent angles) then they are congruent.**

**Proof:**

**Given: <1 is supp to < 3**

**<2 is supp to <3**

**Prove: <1= <2**

**Congruent Complements Theorem:**

**If 2 angles are complementary to the same angle (or to congruent angles) then they are congruent.**

**\*\*\*Proof is similar to the above proof.**

**Linear Pair Postulate:**

**If 2 angles form a linear pair then they are supplementary.**

**Ex. <1 and <2 are supplementary**

**Vertical Angle Theorem:**

**Vertical Angles are congruent.**

**Proof:**

**G: <1 and <2 are vertical angles**

**P: <1=<2**

**Use theorems to solve. . . .**

**Find y.**