2.7 Prove Angle Pair Relationships

Theorems

- **All right angles are** ____________________.

**Congruent Supplements Theorem**
- If two angles are _________________ to the same angle (or to congruent angles), then they are ________________.

**Congruent Complements Theorem**
- If two angles are _________________ to the same angle (or to congruent angles), then they are ________________.

**Linear Pair Postulate**
- If two angles form a ____________________, then they are ________________.

**Vertical Angles Congruence Theorem**
- Vertical angles are ____________________.

Find x and y

![Diagram of two intersecting lines with angles labeled 1, 2, 3, and 4.]

Given: \( \ell \perp m, \ell \perp n \)
Prove: \( \angle 1 \cong \angle 2 \)

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Given: $\angle 1$ and $\angle 3$ are complements  
$\angle 3$ and $\angle 5$ are complements

Prove: $\angle 1 \equiv \angle 5$

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Assignment: 127 #2-28 even, 32-46 even, 50, 52 = 24 total
Extra Credit: 131 #2, 4 = +2