


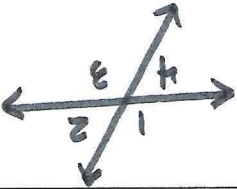
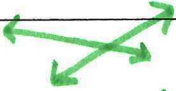




## Prove Angle Pair Relationships

| Vocabulary   | Definition   | Example   |
|--|--|---|
| RIGHT ANGLES CONGRUENCE THEOREM<br>$\angle \cong$ Thm. | All right angles are <u>congruent</u> .  |  <p>If <math>\angle A</math>, <math>\angle B</math>, and <math>\angle C</math> are <math>\perp</math>s, then<br/> <math>\angle A \cong \angle B \cong \angle C</math>. <math>\perp \cong</math> Thm.</p>   |
| CONGRUENT SUPPLEMENTS THEOREM<br>$\cong$ Supp. Thm.    | $m\angle 1 + m\angle 2 = 180^\circ$<br>If two angles are <u>supplementary</u> to the same angle (or to congruent angles), then they are <u>congruent</u> . | <p>If <math>\angle 1</math> and <math>\angle 2</math> are supp. and <math>\angle 2</math> and <math>\angle 3</math> are supp., then <math>\angle 1 \cong \angle 3</math>. <math>\cong</math> supp. Thm.</p>  <p><math>m\angle 1 + m\angle 2 = 180^\circ</math> then <math>\angle 1 \cong \angle 3</math><br/> <math>m\angle 2 + m\angle 3 = 180^\circ</math></p> |
| CONGRUENT COMPLEMENTS THEOREM<br>$\cong$ Comp. Thm.    | $m\angle 1 + m\angle 2 = 90^\circ$<br>If two angles are <u>complementary</u> to the same angle (or to congruent angles), then they are <u>congruent</u> .  | <p>If <math>\angle 1</math> and <math>\angle 2</math> are comp. and <math>\angle 2</math> and <math>\angle 3</math> are comp., then <math>\angle 1 \cong \angle 3</math>. <math>\cong</math> comp. Thm.</p>  <p><math>m\angle 1 + m\angle 2 = 90^\circ</math> then <math>\angle 1 \cong \angle 3</math><br/> <math>m\angle 2 + m\angle 3 = 90^\circ</math></p> |

|  |   |  |
|--|---|--|
| <p>if <math>\angle 1</math> and <math>\angle 3</math> are VAS, then <math>\angle 1 \cong \angle 3</math>, <math>\angle 2 \cong \angle 4</math>.<br/> <math>VA \cong</math></p>   | <p>Vertical angles are <u>congruent</u>.</p> <p>formed by 2 pairs of opposite rays</p>   | <p>VERTICAL ANGLES CONGRUENCE THEOREM<br/> <math>VA \cong</math> THM</p> |
| <p>if <math>\angle 1</math> and <math>\angle 2</math> form a linear pair (LP), then <math>\angle 1</math> and <math>\angle 2</math> are supplementary. LPP</p> <p>if <math>\angle 1</math> and <math>\angle 2</math> are supplementary, then <math>m\angle 1 + m\angle 2 = 180^\circ</math>. Def. of supplementary</p>  | <p>If two angles form a <u>linear pair</u>, then they are <u>supplementary</u>.</p> <p>2 adjacent angles that form a line</p>  | <p>LINEAR PAIR POSTULATE<br/> LPP</p>                                    |