Angle Relationships

Vertical Angles

- starts with an \( \times \)
- two angles formed by the same 2 lines that are not adjacent

Vertical angles are \( \equiv \)
\( m\angle 1 = m\angle 2 \)

Linear Pair

- adjacent angles that make a straight angle
- linear pair angles are supplementary
\( m\angle 1 + m\angle 2 = 180^\circ \)

Corresponding Angles

- same side of transversal
- one interior and one exterior
\( \angle 1 \equiv \angle 2 \text{ iff } p \parallel q \)

Alternate Interior Angles

- alternate sides of transversal
- both interior
\( \angle 1 \equiv \angle 2 \text{ iff } p \parallel q \)

Alternate Exterior Angles

- alternate sides of transversal
- both exterior
\( \angle 1 \equiv \angle 2 \text{ iff } p \parallel q \)

Same-side Interior Angles

- same side of transversal
- both interior
\( \angle 1 \text{ and } \angle 2 \text{ are supplements iff } p \parallel q \)