Corresponding Angles Converse

Examples & Non-Examples

Example	Example	Non-Example
60° \(\lambda \)	t 120° ℓ	t ℓ ℓ m
Since these are corresponding angles, and they are congruent, then lines I and m must be parallel.	Since these are corresponding angles, and they are congruent, then lines I and m must be parallel.	Since lines I and m are parallel, then angles 1 and 2 are congruent because they are corresponding angles.

Definition

The Corresponding Angles Converse states:

"If two lines are cut by a transversal and the corresponding angles are congruent, then the lines are parallel."

In other words:

- If a transversal crosses two lines,
- And the corresponding angles are equal in measure,
- Then the two lines must be parallel.

Why it's useful:

This converse allows you to **prove** that two lines are **parallel** based on angle relationships. It's often used in geometric **proofs and reasoning**.

