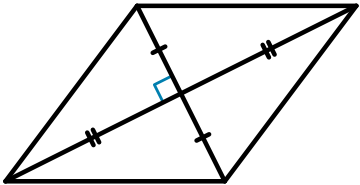
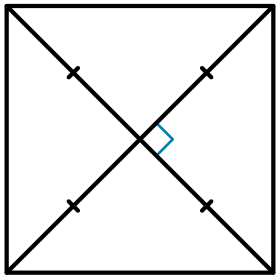
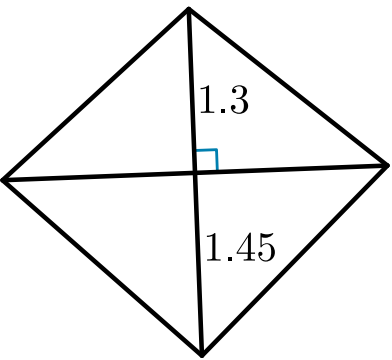


# Rhombus Diagonals Theorem

## Examples & Non-Examples

Example	Example	Non-Example
		

## Statement

The diagonals of a rhombus are perpendicular and bisect each other.

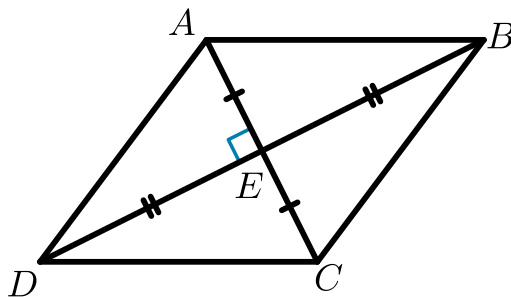
## In simple terms:

In a rhombus, the diagonals cross at right angles ( $90^\circ$ ) and cut each other in half.

## Example:

In rhombus  $ABCD$ , diagonals  $AC$  and  $BD$  intersect at  $E$ . Then:

- $AE = CE$  and  $BE = DE$
- $\angle AEB$ ,  $\angle BEC$ ,  $\angle CED$ , and  $\angle DEA$  are all right angles.



## Why It Matters:

This property helps in proving a shape is a rhombus and in solving for unknown lengths or angles in rhombuses.

