

## Perpendicular Bisectors of a Triangle

Name \_\_\_\_\_

Date \_\_\_\_\_ Period \_\_\_\_\_

### Triangle

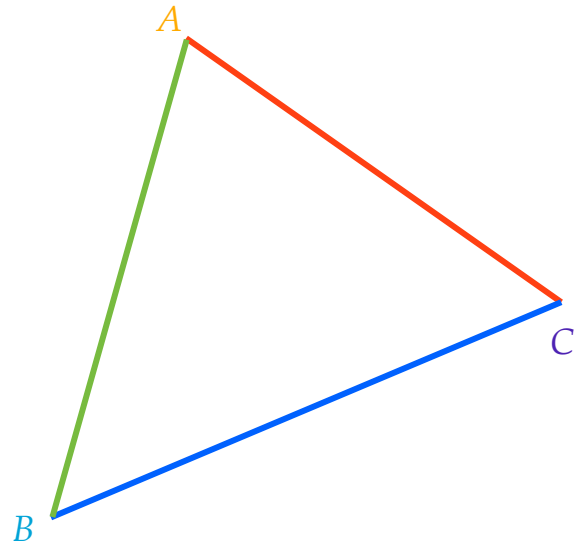
A **triangle** is a polygon with three sides.

3 Sides

3 Vertices

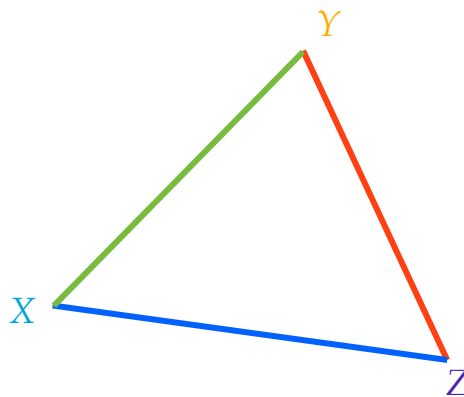
3 Angles

Name a Triangle using the 3 Vertices



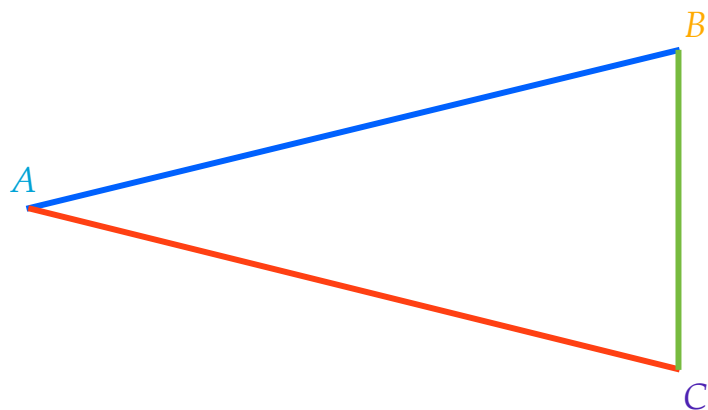
### Perpendicular Bisector

A line or segment that passes through the midpoint of a segment and is perpendicular to that segment.



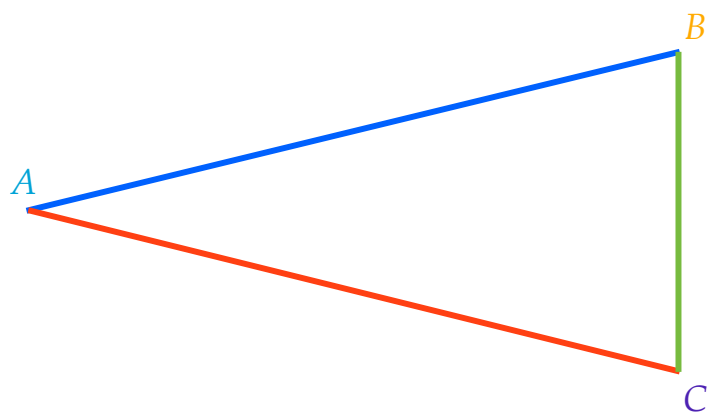
## Perpendicular Bisector Theorem

Any point on the **perpendicular bisector** of a segment is equidistant from the endpoints of that segment.



## Converse of Perpendicular Bisector Theorem

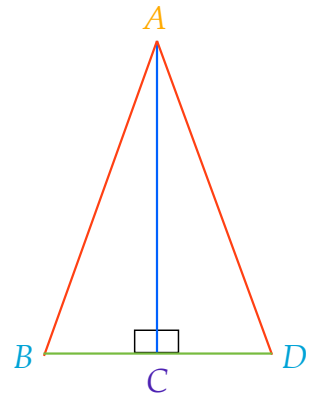
Any point that is equidistant from the endpoints of a segment lies on the **perpendicular bisector** of that segment.



Statements	Reasons

Given:  $\overline{AC}$  is perpendicular  
bisector of  $\overline{BD}$

Prove:  $\triangle ABD$  is Isosceles



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