

Def. $\perp$ Bisector

A line, ray, segment, or plane that intersects a segment at its midpt. and is $\perp$ to the segment

Def. $\perp$ Bisector of a Δ

A line, segment, or ray that bisects the side of a triangle and is $\perp$ to the side.

Th. 5.1 $\perp$ Bisector Th.

If a pt. is on the $\perp$ bisector of a segment, then it is equidistant from the endpts. of the segment.

Th. 5.2

Any pt. equidistant from the endpts. of a segment lies on the $\perp$ bisector of the segment.

Def. $\angle$ Bisector of a Δ

A line, segment, or ray that bisects an $\angle$ of a triangle.

Th. 5.4 $\angle$ Bisector Th.

If a pt. is on the bisector of an $\angle$, then it is equidistant from the sides of the $\angle$.

Th. 5.5

If a point in the interior of an $\angle$ is equidistant from the sides of the $\angle$, then it lies on the bisector of the $\angle$.