Definition of Coplanar Points

POINTS ARE COPLANAR
IFF THEY LIE IN
THE SAME PLANE.

Definition of Collinear Points

POINTS ARE COLLINEAR
IFF THEY LIE ON
THE SAME LINE.
Segment Addition Postulate  \((\text{PART} + \text{PART} = \text{WHOLE})\)

\(A, B, \text{ and } C\) are collinear points with 
\(B\) between \(A\) and \(C\) \(\text{IFF}\)

\(AB + BC = AC\)

Definition of Congruent Segments

\(\overline{AB} \simeq \overline{CD}\) \(\text{IFF} \ AB = CD\)

Segments are congruent \(\text{IFF}\) they have the same measure (or length).
Definition of Segment Bisector

A line or a point **bisects** a segment **iff** it divides the segment into two segments of equal length.

Definition of Midpoint

A point is the midpoint of \( \overline{AC} \) **iff** \( AB = BC \).

B is the midpoint of \( \overline{AC} \) **iff** \( AB = BC \).
Midpoint Theorem

IF M IS THE MIDPOINT OF $\overline{AB}$, THEN $\overline{AM} \cong \overline{MB}$

IF A POINT IS THE MIDPOINT OF A SEGMENT, THEN IT DIVIDES THE SEGMENT INTO TWO CONGRUENT SEGMENTS.

Definition of Polygon

A FIGURE IS A POLYGON IFF...

• IT IS 2-D.
• IT IS CLOSED.
• ITS SIDES ARE ALL STRAIGHT SEGMENTS.
• ITS SIDES INTERSECT ONLY AT ENDPOINTS.