

Subsets of a Line

Postulate 6 For any two points there is a unique positive number called the distance between the two points.

The distance between two points, R and S is expressed as RS or SR

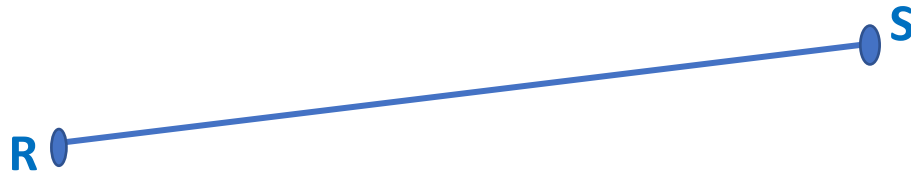
More Definitions

Segment Addition Postulate

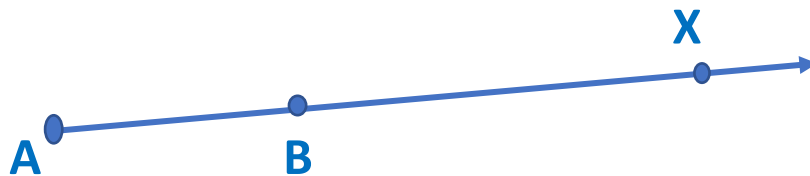
A point between two other points. Point B, on \overleftrightarrow{AC} , is said to be between points A and C if and only if $AB + BC = AC$



Segment – given any two points R and S, segment RS, written as \overline{RS} , are the points R and S and all the points between R and S.



Ray – Ray AB, denoted by \overrightarrow{AB} , is the union of \overline{AB} and all the points x for which it is true that B lies between A and X. The endpoint is always names first.



Opposite Rays – \overrightarrow{SR} and \overrightarrow{ST} are called opposite rays if S lies on \overline{RT} , between R and T



Congruent Segments – segments with equal lengths.

A ————— B

X ————— Y $XY = AB, \therefore \rightarrow \overline{XY} \cong \overline{AB}$

\overline{XY} and \overline{AB} are congruent

Midpoint of a segment – Point M is the midpoint of \overline{RS} , if M lies on \overline{RS} and $RM = MS$.

Bisector of a segment – a line, segment ray or plane that intersects \overline{RS} at its midpoint bisects \overline{RS} , and is a bisector of \overline{RS} .

A symbol for Between – if T lies between points A and B, we write \overline{ATB}