

Chapter 1

Basics of Geometry



1.1 - Points, Lines and Planes

1.2 - Measuring and Constructing Segments

1.3 - Using Midpoint and Distance Formulas

1.4 - Perimeter and Area in the Coordinate Plane

1.5 - Measuring and Constructing Angles

1.6 - Describing Pairs of Angles

1.2 - Measuring and Constructing Segments

Vocabulary

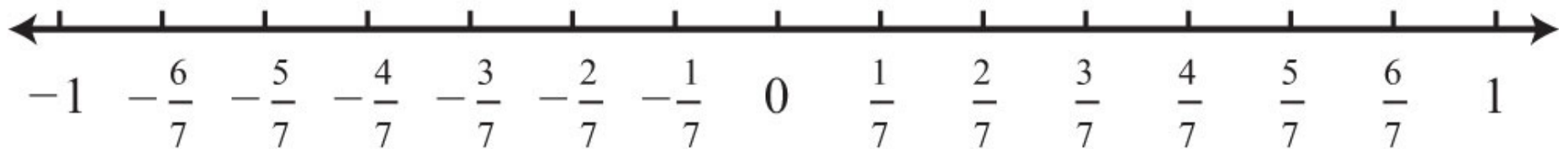
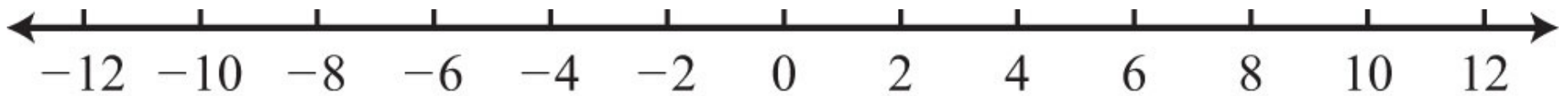
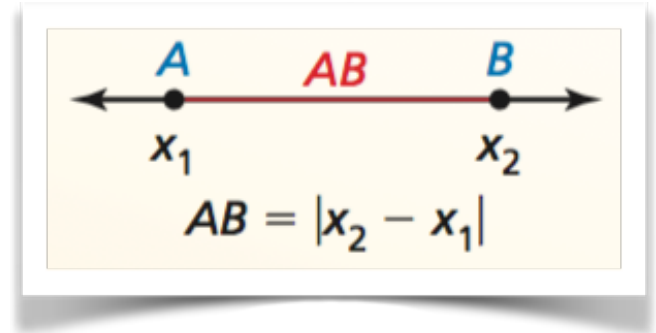
Postulate - a rule or statement that is accepted without proof. Also called an “axiom”.

Theorem - a rule or statement that can be proved.

1.2 - Measuring and Constructing Segments

Vocabulary

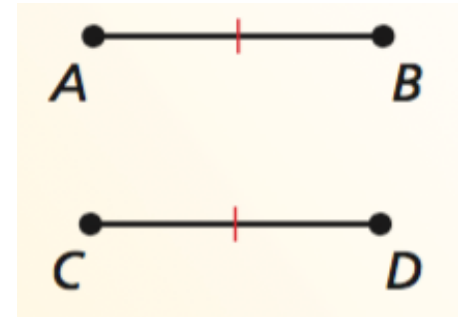
Distance - the absolute value of the difference of the coordinates of points A and B.



1.2 - Measuring and Constructing Segments

Vocabulary

Congruent segments - line segments that have the same length.



Lengths are equal.

$$AB = CD$$



“is equal to”

Segments are congruent.

$$\overline{AB} \cong \overline{CD}$$



“is congruent to”

1.2 - Measuring and Constructing Segments

Construction - a geometric drawing using only a compass and straightedge.

Copy a Segment



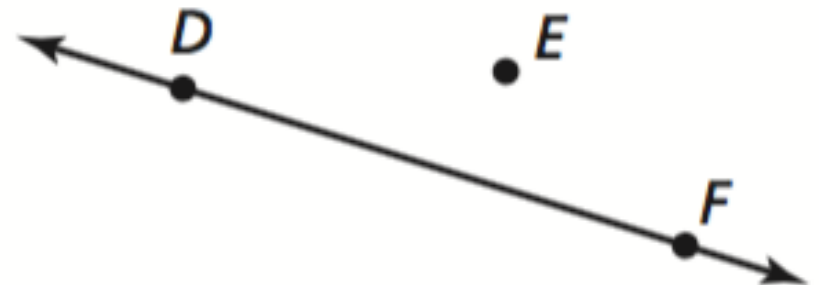
1.2 - Measuring and Constructing Segments

Vocabulary

Between - when three points are collinear, one point is “between” the other two.



Point B is between points A and C .



Point E is not between points D and F .

1.2 - Measuring and Constructing Segments

Segment Addition Postulate

If point B is between points A and C, then

$$AB + BC = AC.$$

