1.3 Segments + Their Measures

Objective
Use segment Postulates
Use the distance formula to measure

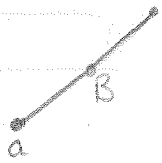
Warm-up
1.3 opener

Vocab
Postulate / axiom - a rule that is accepted without proof
Coordinate - the real number that corresponds to a point
Distance - the absolute value of the difference between coordinates, written AB

Segment Addition Postulate If B is between A and C, then AB + BC = AC, similarly, if AB + BC = AC, then B is between A and C

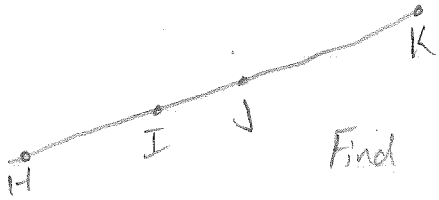
Using the Segment Addition Postulate

Teacher



AB = 5, BC = AB, find BC, AC, are any segments ≅

Student



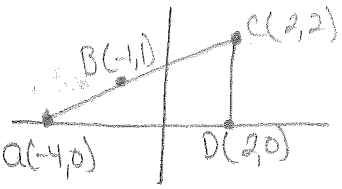
HK = 9, HI = JK, IJ = 1.

Find HI, JK, HJ, IK

Distance Formula
If A and B are points on a coordinate plane, then the distance between A and B is

$$D = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$$

Teacher



Find the distance of: AB, BC, CD, AC

Student

Find the distance between the given points:
(6,4), (-8,11) / (-5,8) (-10,14) / (-4,-20) (-10,15) / (5,-8) (0,0)

Closure

Given:

We know PQ, QR, and RS, how do we find PS?

What is the distance formula?

Homework: 1.3a