

Midpoint of a Segment

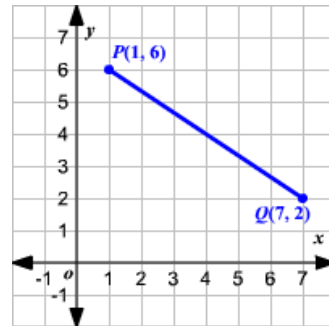
The point halfway between the endpoints of a line segment is called the _____.

A midpoint divides a line segment into _____, or a _____ ratio.

Draw a diagram:

METHOD 1

You may find the midpoint by finding _____ of the _____ distance and _____ of the _____ distance and counting those distances from one of the endpoints.



The Midpoint Formula:

Example 1: Find the midpoint between A(4, 8) and B(1, 12).

Example 2: Find the midpoint between A(-3, 7) and B(5, -9).

Example 3: Find the coordinates of X if Y(-2, 2) is the midpoint of XQ, and Q has the coordinates (2, 8).