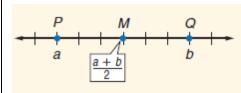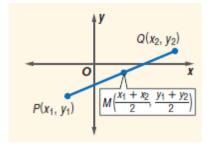# Midpoint classwork

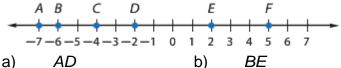| Definition of Midpoint	The midpoint between two points is their "average" x and y values. That would make sense, because the average is right in the middle!
Midpoint Formulas	1. On a number line $\dfrac{a+b}{2}$ 2. On a coordinate plane $\left(\dfrac{x_1+x_2}{2}, \dfrac{y_1+y_2}{2}\right)$

Ex #1: Use the number line below to find the middle, or "average" of each measure.

a) AD b) BE c) FA

Ex #2: Find the coordinates of the midpoint of a segment having the given endpoints.

a) $J(-1, 2), K(6, 1)$ b) $A(5, 12), B(-4, 8)$

Ex #3: Find the coordinates of X if $Y(-1, 6)$ is the midpoint of $\overline{XZ}$ and Z has coordinates $(2, 8)$.