

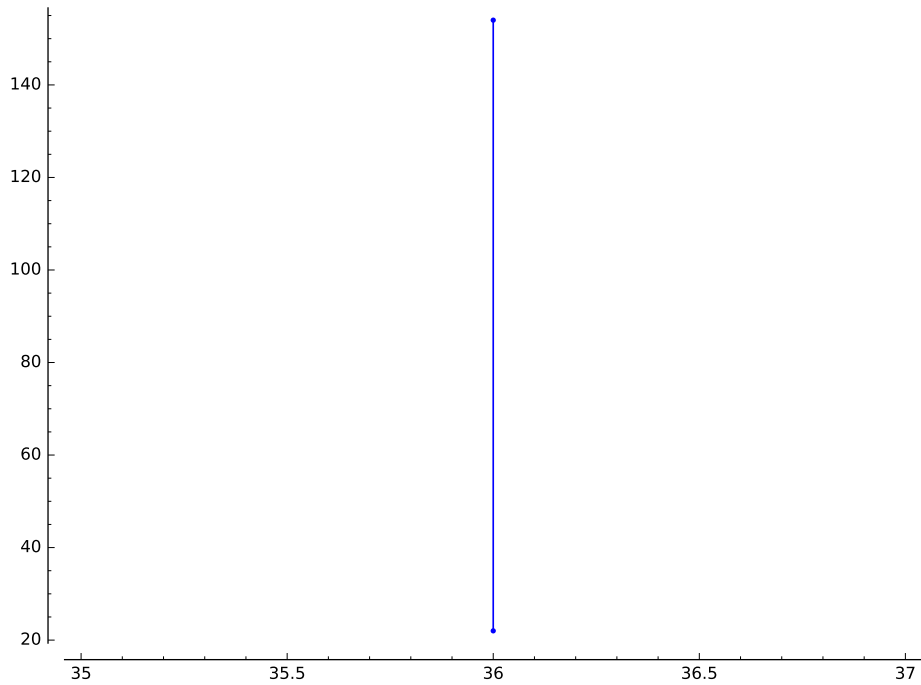
# Homework 3

Madison

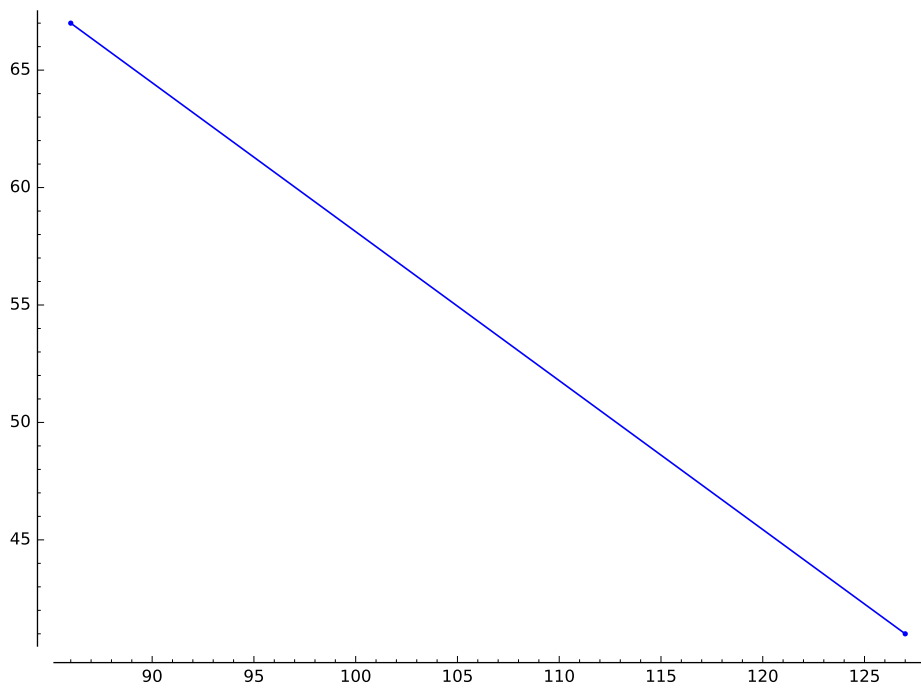
August 24, 2018



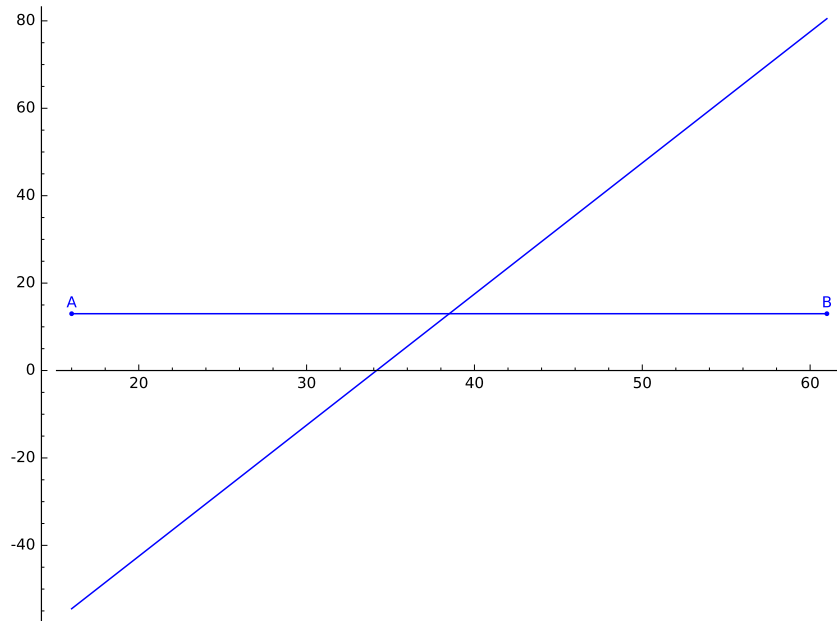
**Problem 1.** Given  $A(94, 194)$  and  $B(126, 194)$ , calculate the midpoint of  $\overline{AB}$  and the distance  $|\overline{AB}|$ .



**Problem 2.** Given  $A(36, 154)$  and  $B(36, 22)$ , calculate the midpoint of  $\overline{AB}$  and the distance  $|\overline{AB}|$ .



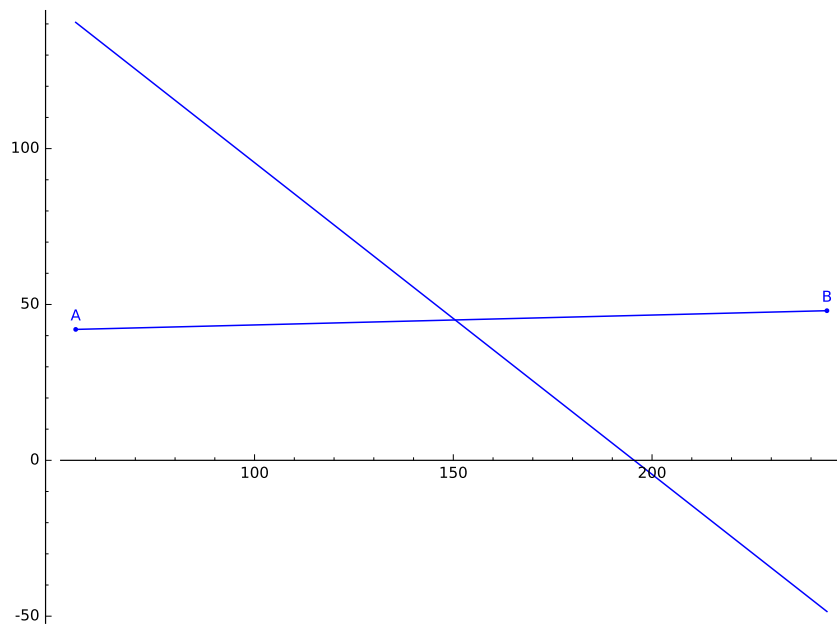
**Problem 3.** Given  $A(86, 67)$  and  $B(127, 41)$ , calculate the midpoint of  $\overline{AB}$ .



**Problem 4.** Given  $A(16, 13)$  and  $B(61, 13)$ , calculate the midpoint of  $\overline{AB}$ . Then, determine if

$$y(x) = 3x - 102.500000000000$$

bisects  $\overline{AB}$ .



**Problem 5.** Given  $A(55, 42)$  and  $B(244, 48)$ , calculate the midpoint of  $\overline{AB}$ . Then, determine if

$$y(x) = -x + 195.500000000000$$

bisects  $\overline{AB}$ .