1. [11 points] Pam the Plumber charges customers $P(t)$ dollars for a $t$ hour visit to their house. A graph of $C = P(t)$ is shown below.

![Graph of C = P(t)](image)

a. [2 points] Find the value of $P(0)$ and explain what it means in context.

$P(0) = \underline{\text{__________}}$

Meaning:

b. [2 points] Find the slope of $P(t)$ and explain what it means in context.

Slope: \underline{\text{__________}}

Meaning:

c. [2 points] Beth the Bathtub-fixer charges $50 for a home visit plus $40/hour spent there. Let $B(t)$ be the amount she charges for a $t$ hour visit. Add the graph of $C = B(t)$ for $0 \leq t \leq 8$ to axes above. **Clearly label at least two points on your graph with their $(t, C)$ coordinates.**

d. [5 points] Find the coordinates of the point where the two graphs intersect and explain what this means in context. **Show all work. Give your final answer in exact form, or rounded to at least two decimal places.**

Point $(t, C) = \underline{\text{__________}}$

Meaning: