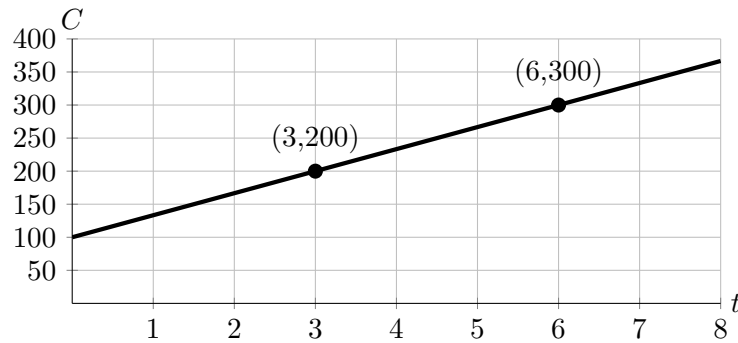


1. [11 points] Pam the Plumber charges customers $P(t)$ dollars for a t hour visit to their house. A graph of $C = P(t)$ is shown below.



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

$P(0) =$ _____

Meaning:

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

Slope: _____

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 $(t, C) =$ _____

Meaning: