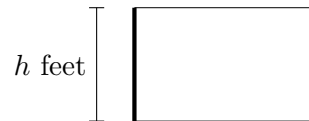


1. [7 points] Gertrude wants to enclose a rectangular region in her backyard. She wants to use high fencing (thick line), which costs \$200 per foot, for one side of the rectangle. For the remaining three sides, she wants to use normal fencing (thin line), which costs \$75 per foot. Let $A(h)$ be the area (in square feet) of the region enclosed by the fence if h is the length (in feet) of the side with high fencing and Gertrude spends \$3000 on fencing for the project.



- a. [4 points] Find a formula for $A(h)$.

Answer: $A(h) =$ _____

- b. [3 points] In the context of this problem, what is the domain of $A(h)$?

Answer: Domain: _____