**2**. [12 points] Erna is a rock climber who is climbing a rock formation. Due to the shape of the formation, the rate at which Erna ascends varies and is given by the graph below.



- **a**. [10 points] Erna starts climbing from the ground at t = 0, and she reaches the top at t = 60, where t is measured in minutes. Use the axes below to carefully sketch a graph of her height above the ground for  $0 \le t \le 60$ .
  - Clearly indicate the coordinates of the points on your graph at t = 0, 10, 20, 30, 40, 50, and 60.
  - Be sure that local extrema and concavity are clear.

## height above



**b**. [2 points] How tall was the rock formation that Erna climbed?

Answer: Height of Rock Formation = \_\_\_\_\_ meters