

*This quiz is worth 10 points, and you have 10 minutes to complete it.*

**Calculators are NOT allowed today.**

**1.** (10 pts) Suppose  $h(t)$  represents the average height, in feet, of a person who is  $t$  years old. Please give BRIEF answers to the following questions.

- (a) In real-world terms, what does  $h(12)$  represent, and what are its units?
  
  
  
  
  
  
  
  
  
  
- (b) In real-world terms, what does  $h'(12)$  represent, and what are its units?
  
  
  
  
  
  
  
  
  
  
- (c) Is  $h(12)$  positive or negative, and why?
  
  
  
  
  
  
  
  
  
  
- (d) Is  $h'(12)$  positive or negative, and why?
  
  
  
  
  
  
  
  
  
  
- (e) At approximately what value of  $t$  would  $h(t)$  have a maximum, and why?
  
  
  
  
  
  
  
  
  
  
- (f) At approximately what value of  $t$  would  $h'(t)$  have a maximum, and why?