

# Quiz 2

You are welcome to use a calculator for this quiz but realize the incorrect answer with no supporting work will receive no partial credit.

1. Use the above density curve to answer the following questions.
  - (a) [1] What is the total area bounded by the horizontal axis and the curve?
  
  
  
  
  
  
  
  
  
  
  - (b) [1] Which letter above best approximates the mean?
  
2. Use Table A to find the value  $z$  of a standard Normal variable that satisfies each of the following.
  - (a) [1] The point  $z$  with 25% of the observations falling below it.
  
  
  
  
  
  
  
  
  
  
  - (b) [2] The point  $z$  with 40% of the observations falling above it.

3. The distribution of heights of women ages 20 to 29 is approximately Normal with mean 64 inches and standard deviation 2.7 inches.

(a) [1] Draw a Normal curve on which this mean and standard deviation are correctly located.

(b) [1] What is the  $z$ -score for a woman 6 feet tall?

(c) [1] What proportion of observations on the above density curve take values less than 6'?

(d) [2] What proportion of observations on the above density curve take values between 5' and 6'?