Ceng272 - Quiz 2

March 30, 2011

1. (Monday Section) Consider the pdf of Y given as

$$f(y) = \begin{cases} -\frac{3}{8}y^2 + y, & 0 \leq y \leq 2 \\ 0, & otherwise \end{cases}$$

   (a) Find the expected value of Y.

   (b) Variance of Y.

2. (Wednesday Section) Consider the pdf of X given as

$$f(x) = \begin{cases} \frac{2}{5}, & 23.75 \leq x \leq 26.25 \\ 0, & otherwise \end{cases}$$

   (a) Plot the density function.

   (b) Compute the expected value of X.

   (c) Are you surprised at your answers in (b)? Explain why or why not..