Quiz #4.
ECON 310 – Ticket Number 16386.

Multiple Choice (2 points each):

1) Consider a market in which demand is given by the function $D(p) = 100 - 2p$. In this market, demand is
   a. elastic at all possible prices.
   b. inelastic at all possible prices.
   c. elastic at all prices above $p = 25$.
   d. inelastic at all prices above $p = 25$.
   e. None of the above answers are correct.

2) Mo likes both $x_1$ = (peanut butter) and $x_2$ = (jelly). He always gets the same additional satisfaction from “2 more ounces of peanut butter” as he does from “one more ounce of jelly.” Which of the following utility functions is consistent with these preferences?
   a. $U(x_1, x_2) = 2x_1x_2$.
   b. $U(x_1, x_2) = \min\{x_1, 2x_2\}$.
   c. $U(x_1, x_2) = x_1 + 2x_2$.
   d. $U(x_1, x_2) = 2x_1 + x_2$.
   e. Any of the above utility functions is consistent with the stated preferences.

3) Consider the production function $F(L, K) = 10LK$. In comparison to the input combination $(\hat{L}, \hat{K}) = (25, 4)$, the input combination $(\bar{L}, \bar{K}) = (2, 50)$
   a. is on the same isoquant.
   b. is on an isoquant closer to the origin.
   c. is on an isoquant further from the origin.
   d. produces less output.
   e. More than one of the above answers is correct.

4) By definition, good two is a normal good if
   a. an increase in $p_2$ leads to decreased consumption of good two.
   b. a decrease in $p_2$ leads to increased consumption of good two.
   c. an increase in income leads to increased consumption of good two.
   d. a decrease in income leads to increased consumption of good two.
   e. the good has no close substitutes.

5) Consider a consumer with $U(x_1, x_2) = \min\{x_1, x_2\}$. If $p_1 = 2$, $p_2 = 3$, and $I = 30$, then this consumer maximizes utility by consuming
   a. $x_1^* = 15$ and $x_2^* = 0$.
   b. $x_1^* = 0$ and $x_2^* = 10$.
   c. $x_1^* = 15$ and $x_2^* = 10$.
   d. $x_1^* = 6$ and $x_2^* = 6$.
   e. $x_1^* = 7.5$ and $x_2^* = 5$. 