Unit 3 Quiz A

1) What is the key difference between discrete and continuous choices?

   Answer: Discrete choices involve selecting from distinct options, while continuous choices involve selecting a quantity along a continuous scale, like ounces of spaghetti.

2) What does the logit model estimate: the exact utility or the difference in utility?

   Answer: The logit model estimates the difference in utility (V_diff) between two options, not the exact utility.

3) What is the main advantage of using a logit model over a linear probability model?

   Answer: The logit model ensures predicted probabilities stay within the [0, 1] range and allows for varying marginal effects.

4) How do you interpret the coefficient $\hat{\beta}_1$ in a logit model?

   Answer: it estimates the change in the log odds of choosing option A for a one-unit increase in the explanatory variable.

5) What is the formula for the probability of choosing option A in a logit model?

   Answer: Prob(A) = exp(b0 + b1 x) / (1 + exp(b0 + b1 x))

6) What does the term "log odds" mean in the context of a logit model?

   Answer: Log odds is the natural logarithm of the ratio of the probability of an event occurring to the probability of it not occurring: log(P/(1-P)).