# STAT 217: Types of Errors

1. How would you describe a type I error in the context of the paper towel experiment (brand vs. drops)?

   A. We find no evidence for at least one difference in the true mean time to failure across number of drops (after controlling for brand), when truly there is no difference.

   B. We find evidence for at least one difference in the true mean time to failure across number of drops (after controlling for brand), when truly there is a difference.

   C. We find no evidence for at least one difference in the true mean time to failure across number of drops (after controlling for brand), when truly there is a difference.

   D. We find evidence for at least one difference in the true mean time to failure across number of drops (after controlling for brand), when truly there is no difference.

2. How would you describe a type I error in the context of the Method vs. Ability example you did on Wednesday's worksheet?

   A. We find evidence for a difference between bluebook and computer methods (after controlling for ability), when truly there is no difference.

   B. We find no evidence for a difference between bluebook and computer methods (after controlling for ability), when truly there is no difference.

   C. We find no evidence for a difference between bluebook and computer methods (after controlling for ability), when truly there is a difference.

   D. We find evidence for a difference between bluebook and computer methods (after controlling for ability), when truly there is a difference.

3. Also label the answers that describe the type II error.