

Module 2D Questions:

1. What is the total degree of freedom and the standard error of difference between $\text{mean}_1 = 32$ and $\text{mean}_2 = 30$, given that $n_1 = 10$, $n_2 = 15$; $s_1 = 2$ and $s_2 = 3$. (The variable in both population is normally distributed)
 - A. $df = 23$; $SE = 1.13$
 - B. $df = 24$; $SE = 1.13$
 - C. $df = 23$; $SE = 1.08$
 - D. $df = 24$; $SE = 1.08$
 - E. $df = 23$; $SE = 0.66$
2. From the 12-mouse dataset: Does B6 strain have different glucose levels on Chow vs HFD?
3. A study was performed among patients with piriformis syndrome (PFD). A randomized, double-blind clinical trial was performed where patients were injected with a placebo or Botox. Patients were asked to return at 3 months post-injection and to rate their improvement in pain (large numbers were most improved). The patients were NOT matched by SES, or other features, and were randomly sampled from a patient pool. They had either placebo or Botox injected (no-one had both injected).

Group	Mean	sd	N
Placebo	19.8	20.9	11
Botox	49.7	38.2	19