AP Stats Chapter 10 MCQ

Henry Beveridge

March 21, 2025

1. A; Shape = approximately normal, mean = 0.15, standard deviation = 0.07

2. B; $H_0 : \hat{p}_1 - \hat{p}_2 = 0; H_a : \hat{p}_1 - \hat{p}_2 > 0$

3. A; $z = \dfrac{0.56 - 0.527}{\sqrt{\dfrac{0.56(0.44)}{250} + \dfrac{0.527(0.473)}{300}}}$

4. B; The distribution of differences (before – after) must be approximately Normal.

5. B; $t = 1.027$

6. C; Two-sample t interval

7. A; Both dotplots are roughly symmetric. There are no outliers in either dotplot.

8. C; $H_0 : \mu_1 = \mu_2; H_a : \mu_1 \neq \mu_2$

9. E; We fail to reject H_0: we do not have convincing evidence that the mean carbohydrate contents are different.

10. B; $(6.41 - 5.20) \pm 2.262\sqrt{\frac{25}{10} + \frac{225}{15}}$