quiz 19
math2228.04
u new haven
w 04 dec

name: Solution

1 (12 points). The one-sample t statistics for testing

$$H_o: \mu = 8$$
$$H_a: \mu > 8$$

from a sample of $n = 22$ observations has the value $t = 2.24$.

(a) What are the degress of freedom from the statistic?
(b) Give the two critical values t^* from the t-distribution table that fall on either side of t.
(c) Between what two values does the P-value of the test fall?
(d) Is the value $t = 2.24$ significant at the 5% level? At the 1% level?

a) 21

b) ~~0.025 & 0.1~~ 2.080 & 2.518

c) 0.025 & 0.01

d) • The biggest our Pvalue can be is 0.025, so it's significant at $\alpha = 0.05$.

• The Pvalue is larger than 0.01 so $t = 2.24$ is not significant at $\alpha = 0.01$.