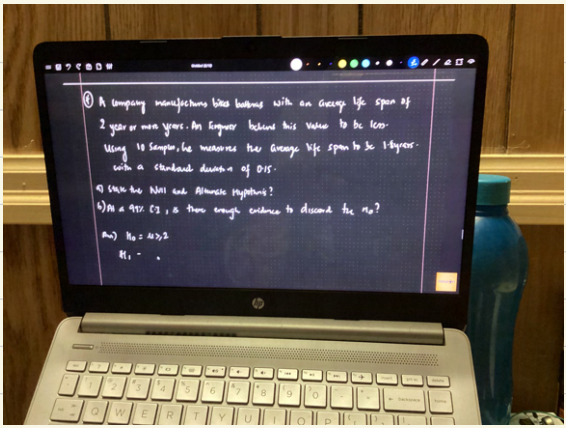
9



→ $H_0 = \mu \geq 2$

$H_1 = \mu \not\geq 2$

Population Data

$\mu = 2$

Sample Data

$n = 10$

$\bar{x} = 1.8$ years

$\sigma = 0.15$

Average

Z-Test

① Population standard deviation or

② $n \geq 30$: No population std dev

T-Test

① Population standard deviation or variance

② $n < 30$

We select T-test

CI = 99.1 $\alpha = 0.01$

Degree of freedom $(n-1) = 9$

-2.82

↳ We get this value directly in t-Table

Test statistic

$$t = \frac{\bar{x} - \mu}{s/\sqrt{n}} = -4.216$$

$-4.216 < -2.812$

Reject Null hypothesis