

Review #3

1.) B 2.) C 3.) C 4.) D 5.) B

6.) A 7.) E 8.) D 9.) C 10.) A

11.) a.) $\mu_{\hat{p}} = .06$ $\sigma_{\hat{p}} = \sqrt{\frac{.06(1-.06)}{250}} = .015$

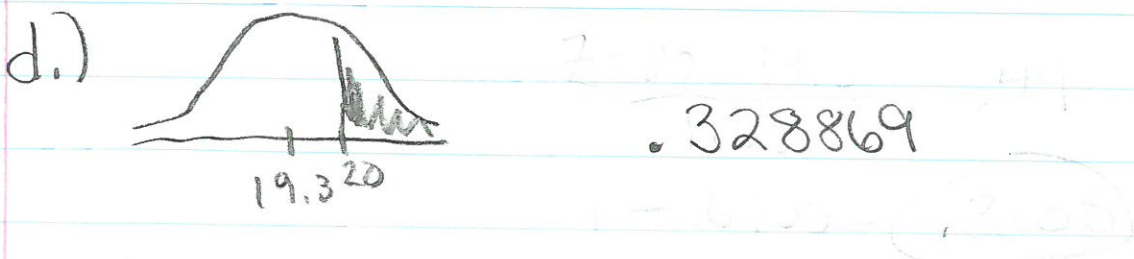
b.) $np \geq 10$ and $n(1-p) \geq 10$
 $250(.06) = 15 \geq 10$ $250(1-.06) = 235 \geq 10$



12.) a.) Population is not normally distributed

b.) $\mu_{\bar{x}} = 19.3$ $\sigma_{\bar{x}} = \frac{15.8}{\sqrt{100}} = 1.58$

c.) Approximately Normal, my sample size (100) is greater than 30

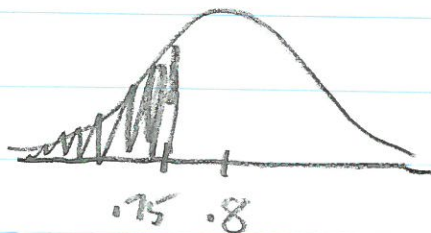


13.) Sample Proportion
Check the conditions

① $10n < N$
 $10(125) = 1250 < \text{all middle school students in a large school district}$

② $np \geq 10$ $n(1-p) \geq 10$
 $125(.8) = 100 \geq 10$ $125(1-.8) = 25 \geq 10$

$\mu_p = .8$ $\sigma_p = \sqrt{\frac{.8(1-.8)}{125}} = .036$



$z = \frac{.75 - .8}{.036}$

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