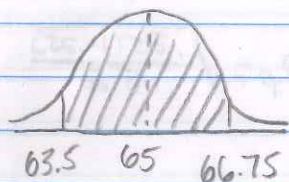


Chapter 9 Worksheet Test Review

9/20/18

- 1) Took a sample of 100 trees. The 40% is the statistic that talks about the sample. s with s , p with p
(B)
- 2) If we do something again and again, we should get closer and closer to the theoretical probability
(C)
- 3) As n increases.... Also, as we rolled 4 or 6 or 8 or 10 die, our mean never changed.
(C)

4)



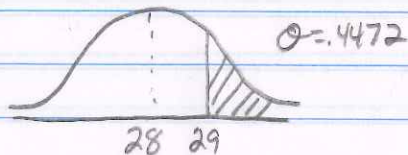
$$\sigma_{\bar{x}} = \frac{5}{\sqrt{10}} \quad \sigma_{\bar{x}} = 1.4434$$

$$z = \frac{66.75 - 65}{1.4434}$$

$$z = \frac{63.5 - 65}{1.4434}$$

(.7377)

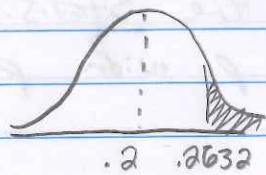
- 5) Refer to #3
(mean = \$28, std dev = .4472)



$$z = \frac{29 - 28}{.4472}$$

(.0125)

$$6) n=19, p=\frac{1}{5}=.2 \quad \hat{p}=\frac{5}{19}=.2632 \quad \sigma_p = \sqrt{\frac{.2(1-.2)}{19}}$$

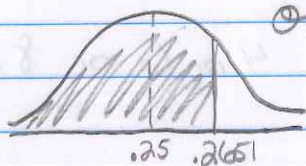


$$\sigma = .09177$$

$$Z = \frac{.2632 - .2}{.09177}$$

(.2451)

$$7) n=83 \quad p=\frac{1}{4}=.25 \quad \hat{p}=\frac{22}{83}=.2651 \quad \sigma_p = \sqrt{\frac{.25(1-.25)}{83}}$$

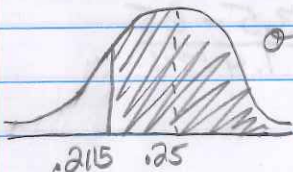


$$\sigma = .04753$$

$$Z = \frac{.2651 - .25}{.04753}$$

(.6255)

$$8) n=52 \quad p=\frac{1}{4}=.25 \quad \hat{p}=\frac{11}{52}=.2115 \quad \sigma_p = \sqrt{\frac{.25(1-.25)}{52}}$$



$$\sigma = .06005$$

$$Z = \frac{.2115 - .25}{.06005}$$

(.7386)

$$9) \sigma_p = \sqrt{\frac{p(1-p)}{n}}$$

$$.013 = \sqrt{\frac{.41(1-.41)}{n}}$$

(1432)

$$10) \sigma_x = \frac{\sigma}{\sqrt{n}}$$

$$11 = \frac{120}{\sqrt{n}}$$

(120)

$$1) \sigma_p = \sqrt{\frac{p(1-p)}{n}}$$

$$.0012 = \sqrt{\frac{.55(1-.55)}{n}}$$

(171875)

$$2) \sigma_{\bar{x}} = \frac{\sigma}{\sqrt{n}}$$

$$.4 = \frac{5.68}{\sqrt{n}}$$

(202)