

20. $\hat{p} = .5$
 $n = 100$

$z = 1.645$

$$\hat{p} \pm z * \sqrt{\frac{\hat{p}(1-\hat{p})}{n}}$$

$$.5 \pm 1.645 * \sqrt{\frac{.5(.5)}{100}}$$

$$.5 \pm .0823 = (.418, .582)$$

OR

$$(41.8\%, 58.2\%)$$