

Assign

(a) 80% \rightarrow CI, $\bar{x} = 520$, $\sigma = 100$, $n = 25$

$\Rightarrow 1 - 0.8 = 0.2$

point estimate $= \bar{x} \pm Z_{\alpha/2} \left(\frac{100}{\sqrt{25}} \right)$

$= 520 \pm 0.5398 (20)$

Higher $= \underline{530.796}$
fence

Lower fence $= \underline{509.204}$

