Assignment

CI = 80% $\sigma = 100$ $n = 25$ $\bar{x} = 520$

$\alpha = 1 - 0.8 = 0.2$

$\frac{Z\alpha}{2} = \frac{0.2}{2} = 0.1$

Lower fence $\bar{x} - \frac{Z\frac{\alpha}{2} \cdot \sigma}{\sqrt{n}}$

$\Rightarrow 520 - \frac{1.28 \times 100}{\sqrt{25}} \Rightarrow 494.4$

Upper fence $\bar{x} + \frac{Z\frac{\alpha}{2} \cdot \sigma}{\sqrt{n}} \Rightarrow 545.6$