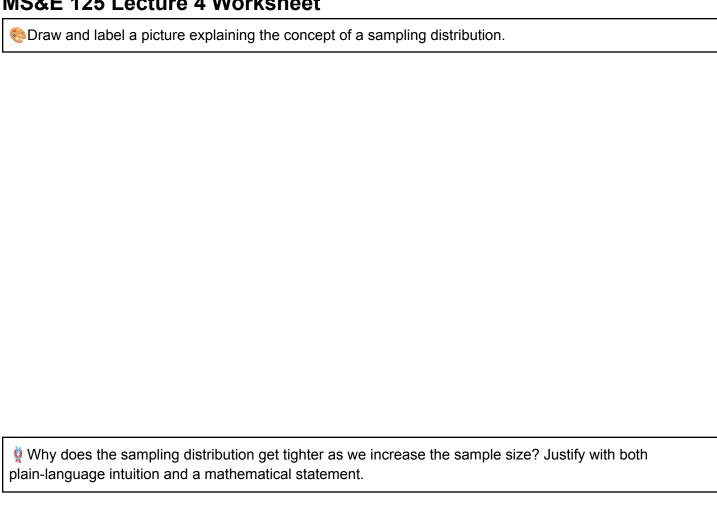
MS&E 125 Lecture 4 Worksheet



IIIIWhat is the value of $\Phi^{-1}(0.025)$? Draw a picture to support your answer.

 \triangle Suppose $\hat{p}_n \approx N(p, \hat{\rm se}^2)$ by the Central Limit Theorem. Construct a 95% confidence interval for p. Recall the general formula for a normally-approximated confidence interval:

$$C_n = (\hat{\theta}_n - z_{\alpha/2}\hat{se}, \ \hat{\theta}_n + z_{\alpha/2}\hat{se})$$

♦ 41% of registered voters in the April 5 – April 9 poll said they would vote for Biden, compared with 37% who picked Trump. Responses were from 833 registered voters surveyed online. The poll had a margin of error of 4% with 95% confidence. What is the maximum possible margin of error for estimating any proportion with n=833 and 95% confidence?