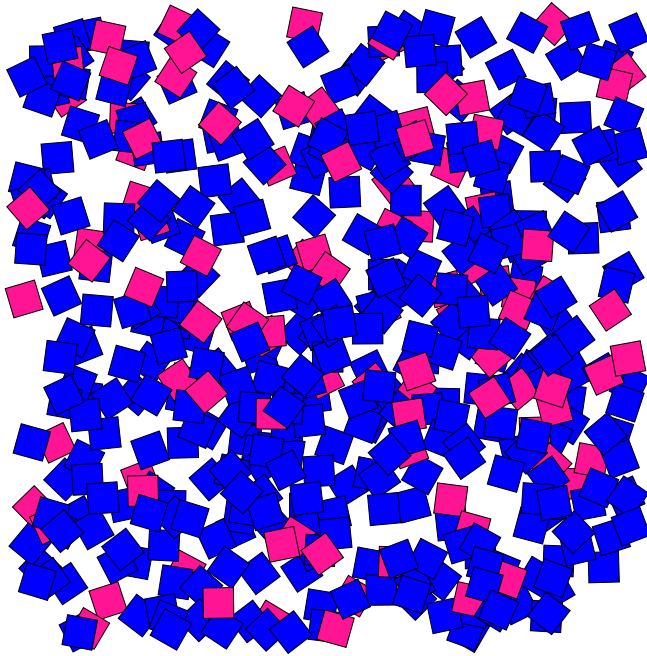


Sampling distribution for proportions

Population distribution



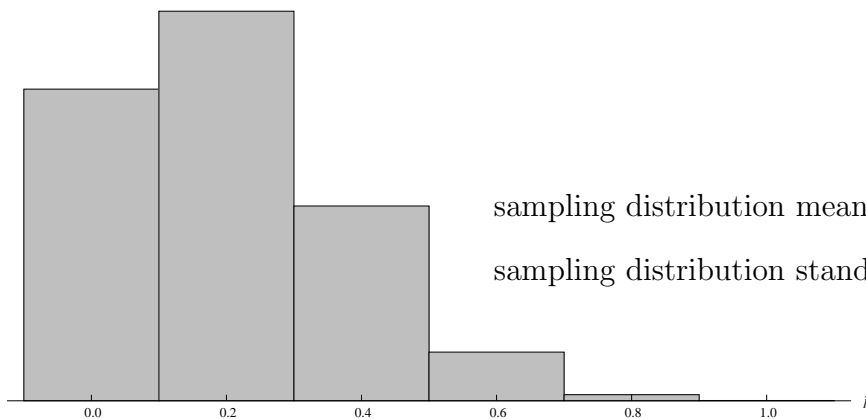
population distribution proportion p

One sample



sample size n
sample proportion \hat{p}

Sampling distribution of all possible sample proportions



sampling distribution mean $\mu_{\hat{p}} = p$

sampling distribution standard deviation $\sigma_{\hat{p}} = \sqrt{\frac{p(1-p)}{n}}$