

Lecture 20: Single Proportion Test

Chapter 6.1

Question for Today

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- ▶ What was n ?
- ▶ What is the **SE** of $\hat{p} = 44\% = 0.44$?
- ▶ What is the sampling distribution of \hat{p} ?

Question for Today

Conditions for Sampling Dist'n of \hat{p} Being Nearly Normal

What p to use?

Back to Poll

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Confidence Intervals

Hypothesis Tests

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Thomas Carcetti is running for mayor of Baltimore. His campaign manager **claims** he has more than 50% support of the electorate.

The Baltimore Sun collects a random sample of $n = 500$ likely voters and finds that 52% support him. Does this provide convincing evidence for the claim of Carcetti's manager at the 5% significance level?

Hypothesis Tests

Next Time

Same as with the jump from

$$\mu \text{ to } \mu_1 - \mu_2$$

i.e. from one to two-sample tests for means, we make the jump from

$$p \text{ to } p_1 - p_2$$

i.e. from one to two-sample tests for proportions.