

Objectives

- 1) Learn what two-sided alternative hypothesis
- 2) Learn 1-PropZTest on TI-Calculator

Define these terms

Two-sided alternative hypothesis	
One-sided alternative hypothesis	

Advances in medical care such as prenatal ultrasound examination now make it possible to determine a child's sex early in a pregnancy. There is a fear that in some cultures some parents may use this technology to select the sex of their children. A study from Punjab, India (E. E. Booth, M. Verma, and R. S. Beri, "Fetal Sex Determination in Infants in Punjab, India: Correlations and Implications," *BMJ* 309 [12 November 1994]: 1259–1261), reports that, in 1993, in one hospital, 56.9% of the 550 live births that year were boys. It's a medical fact that male babies are slightly more common than female babies. The study's authors report a baseline for this region of 51.7% male live births.

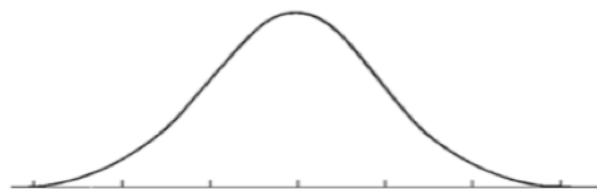
Question: Is there evidence that the proportion of male births is different for this hospital?

Check the conditions: Also write the name of the model and test for our hypothesis test.

Write down the hypothesis.
(Which one shall we write, Two-sided or One-sided alternative hypothesis?)

Calculate sd, z score and P-value :

Indicate above into listed below natural model



If the significant level (α level) was set at 5%, conclude the statement after the above hypotheses test.