

A study of the pay of corporate chief executive officers (CEOs) examined the increase in cash compensation of the CEOs of 104 companies, adjusted for inflation, in a recent year. The mean increase in real compensation was $\bar{x} = 8.9\%$. Past records show that it is reasonable to use $\sigma = 55\%$. Is this good evidence that the mean compensation μ of all CEOs increased that year?

1. Perform a significance test at the $\alpha = 0.05$ significance level of $H_0 : \mu = 0$ versus the appropriate alternative hypothesis. Follow the Inference Toolbox.
2. Construct a 95% confidence interval for the mean salary increase of all CEOs. Follow the Inference Toolbox. (You may refer to work already done in Question 1.)
3. Discuss what the two previous questions tell you about the statistical significance and the practical significance of CEO salaries.