

# [Minitab](https://assignbuster.com/minitab-essay-samples/)

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Assignment In June of 2009, a Pew Poll asked 1005 randomly selected people: Which over-the-counter drug do doctors recommend to help prevent heart attacks? Is it aspirin, cortisone, or antacids? (Options were rotated.) Of 1005, 914 correctly chose aspirin. Determine a 95% confidence interval for the population proportion who knew the correct answer.   
SOLUTION   
We sought to determine a 95% confidence interval for the population proportion who knew the correct answer   
Assumptions;   
Before we decide on the test to use, we make the following assumptions;   
Random sampling from a defined population   
Interval or ratio scale of measurement   
Population is normally distributed   
Test and CI for One Proportion: Correct drug   
Test of p = 0. 5 vs p not = 0. 5   
Event = 1   
Variable X N Sample p 95% CI Z-Value P-Value   
Correct drug 914 1005 0. 9095 (0. 8902, 0. 9257) 36. 714 0. 000   
The p-value is given as 0. 000 (a value less than α= 0. 05); we thus reject the null hypothesis and conclude that there is significant difference in the proportion of those who gave the right answers and those that gave wrong answers. The Z-Score is 36. 714. The p-value is 0. 000. The result is significant at p