

### Answer on Question #48832 – Math – Statistics and Probability

A poll finds that 57% of the population approves of the job that the President is doing; the poll has a margin of error of 2% (assuming a 95% degree of confidence).

What is the 95% confidence interval for the true population percentage that approves of the President's performance?

#### Solution

The 95% confidence interval for the true population percentage that approves of the President's performance is

$$(\bar{p} - ME; \bar{p} + ME),$$

where  $\bar{p} = 57\%$  and  $ME = 2\%$ . So,

$$(57\% - 2\%; 57\% + 2\%) = (55\%; 59\%).$$

**Answer: (55%; 59%).**