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- standard deviation is also called **sampling error**

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  - If you quadruple n, σ shrinks by 2

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  - $[.625, .655]$ (shorthand)

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2.1	.9821	.9826	.9830	.9834	.9838	.9842	.9846
2.2	.9861	.9864	.9868	.9871	.9875	.9878	.9881
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- To cut the margin of error in half, how many more people do we need to survey?
  - Four times as many

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- What is the m.e. for a 99.7% level of confidence?
  - First need to know σ

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- We are 99.7% sure that the percentage of GOP voters that favor the shutdown is within 4.59% of 71%
- What is the 99.7% confidence interval?
  - Approximately $[.664, .756]$