| Name(s) <br> Landon H. Aaker | Project Number |
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| Project Title |  |
| Standard Deviation Comparisons of Population Sizes |  |

Objectives/Goals Abstract
I am trying to determine how large a survey sample must be to get an accurate representation of a whole
population.
Methods/Materials
I rolled a dice 600 times and recorded it then plugged in different sizes of samples of the population into
an equation to determine the standard deviation.
Results
15\% of the whole population will give you an accurate representation.
Conclusions/Discussion
The smallest sample required for reliable results is $15 \%$ of the whole population.

## Summary Statement

I am trying to determine statistically how large a survey sample must be to get an accurate representation of a whole population.

Help Received

