

ANCHALEE PLOYKEAW : ESTIMATION OF SAMPLE SIZE FOR SIMPLE
RANDOM SAMPLING WHEN POPULATION HAS NORMAL OR APPROXIMATE
NORMAL DISTRIBUTION . THESIS ADVISOR : ASSO. PROF. SORACHAI
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At present, most of primary data collectors frequently encounter the problem of sample size determination due to lack of published tables. Moreover, steps in finding the sample size are rather complex and inconvenient for users who do not have much knowledge about statistics. The purpose of this study is to estimate sample size for estimating population mean and population proportion using simple random sampling method, when population has normal or approximate normal distribution. The result of the study are summarized and presented in terms of graph showing sample size under various important conditions and a package program. Both the graph and the package program were developed using TURBO PASCAL version 5.5.

In using the graphs, users are able to find the sample sizes after specifying the value of some important conditions. For the package program, users are able to determine the value of conditions by

- a) choosing to define the value by themselves or
- b) choosing the value from the choices offered by the program.

Furthermore, the package program also provides usage instructions and meaning of the important conditions relevant to the sample size estimation. Definitions and meaning of statistical terms are also provided through selections of appropriate function keys.