

Math 160/263 Minitab Assignment # 4 - Windows Version

Chapter 3 - Sampling

Worksheet Name - data4.MTW

Of the 1190 tenured professors at the University of Arizona, 61 are aged 31 to 39, 370 are aged 40 to 49, 463 are aged 50 to 59, 271 are aged 60 to 69, and 25 are aged 70 or older. A stratified random sample of 6 of the professors that are between the ages of 30 and 39, 37 of the professors that are between the ages of 40 and 49, 46 of the professors that are between the ages of 50 and 59, 27 of the professors that are between the ages of 60 and 69, and 3 of the professors that are 70 or older gives each tenured professor approximately 1 chance in 10 to be chosen. This sample design gives every individual in the population approximately the same chance to be chosen for the sample. The professors have been labeled 1 through 1190, and the age of each professor has been recorded. This information is given in data4.MTW.

1. Use the **Calc > Random Data > Sample from Columns** menu command to select an SRS of size 119 from the 1190 tenured professors.
2. Use the **Stat > Tables > Tally** menu command to summarize the results.
3. How many of the professors in the sample are aged 50 to 59? How many of the professors in the sample are aged 70 or older?
4. Explain how the SRS differs from the stratified random sample.

Source: <http://daps.arizona.edu>.