SUGGESTED COURSE EXTENSIONS

A. Reviewing

1. Find a report about recent patterns in mortality, fertility (National Center for Health Statistics website), or unemployment (Bureau of Labor Statistics website).

   a. Identify an example in that report of each of the following: rank, difference, ratio, and percentage difference or change.

   b. For each example, identify the reference value. Does it come from within their data or some other source (e.g., a historic value or a reference population)?

   c. Read the explanation of each of your chosen examples. Is each one clear? If not, use the criteria outlined in chapter 5 to improve the explanation.

   d. Identify at least one instance where a different (or additional) comparison would be useful. Perform the calculations and describe the results, not the mathematical steps involved in the comparison.

B. Applying Statistics

1. Find a problem from a statistics or research methods textbook that involves comparison of two or more numbers.

   a. Identify a pertinent comparison value for the topic and units under study.

   b. Choose two ways to compare the numbers (e.g., rank, difference, ratio, or percentage difference).

   c. Explain your choice of types of quantitative comparisons, with reference to the level of measurement for that variable and to a related research question or issue.

   d. Calculate the pertinent comparisons.

   e. Write a paragraph that interprets the results of the comparisons from part d.

   f. Use the checklist at the end of chapter 5 in *Writing about Numbers*, 2nd Edition, to evaluate completeness and clarity of your writing.

2. Use a spreadsheet to complete the population growth question from this chapter's problem set.

   a. Repeat the growth projections using the formula for annual compounding in place of the formula for continuous compounding (see "Annual Growth Rates" in *Writing about Numbers*, 2nd Edition, 111–12). Which formula predicts faster growth?

   b. Repeat the population projection using a negative growth rate ($r = -0.02$). How much population is lost over the 10-year period?

C. Writing and Revising

1. Identify a quantitative background fact for the introductory section of your paper to compare with information for other time periods or cases.
   a. Select two pertinent types of quantitative comparisons for that fact.
   b. Explain your choice of types of quantitative comparisons, with reference to the level of measurement for that variable and to the topic of your paper.
   c. Look up the pertinent comparison data and calculate the comparisons.
   d. Write a paragraph that interprets the results of the comparisons from part c.
   e. Use the checklist at the end of chapter 5 to evaluate the completeness and clarity of your description.

2. Repeat question B.1 with data from the results section of your paper.