

5

Types of Quantitative Comparison

SUGGESTED COURSE EXTENSIONS

■ A. REVIEWING

1. Find a report about recent patterns in mortality, fertility (National Center for Health Statistics Web site), or unemployment (Bureau of Labor Statistics Web site).
 - a. Identify an example of each of the following: rank, absolute difference, relative difference, 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 outlines 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.
 - b. Choose two ways to compare the numbers. Explain your choice of types of quantitative comparisons, with reference to a related research question or issue.
 - c. Calculate the pertinent comparisons.
 - d. Write a paragraph that integrates those types of quantitative comparisons.
 - e. Use the checklist at the end of chapter 5 in *Writing about Numbers* 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 Rates," in *Writing about Numbers*, 96). Which results in 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. Explain your choice, with reference to the topic of your paper.
 - b. Look up the pertinent comparison data and calculate the comparisons.
 - c. Write a paragraph that integrates those types of quantitative comparisons.
 - d. Use the checklist at the end of this chapter to evaluate the completeness and clarity of your writing.
2. Repeat question B.1 with data from the results section of your paper.