

Quantitative Reasoning (L6) Proficiency Portfolio Exam
Can use mathematical symbols, concepts, and methods to describe and solve problems.

Updated 3-22-06

DIRECTIONS FOR COMPLETING THE PROFICIENCY PORTFOLIO EXAM

The Quantitative Reasoning Portfolio Exam is an opportunity for you to clarify that you have already developed the proficiency for this competence. Use the following chart (page 3) to list evidence that shows you meet the criteria for this competence. You may include work, college-level courses, and other accomplishments that demonstrate your proficiency in Quantitative Reasoning. **You must complete an entry for each criterion (see example on page 4.)**

Complete the chart—each row—and briefly note the evidence that you are proficient in each of the areas listed on the chart. You may cite the same evidence for more than one category. **Your portfolio must include at least three different components that substantiate your proficiency. For example, you might include a college course you took for several of the criteria, a certificate you earned for several of the criteria, and work project you completed for several criteria, but you must include three different kinds of experiences/work that demonstrate your development of the proficiency. Any course work you cite must be college-level.** Any courses you identify to meet this proficiency also can be applied to meet a competence in another part of your SNL degree.

Use the chart on page 2 to clarify the evidence you are citing for this proficiency.

The example on pages 3-4 shows how to clarify the components in your portfolio.

- ✓ For any course work, include date of course, title of course, course description, institution, and grade.
- ✓ For any professional work, include dates of employment and position.
- ✓ For any project work, include organization or group with which you completed the project, dates of the work.

Attach relevant documents to this summary, including documentation of work or course work. Course work documentation can consist of listing of course, college/university, course number, date completed, and grade. If you are including any professional work be sure to include not only a statement about the work you do but also evidence of work that applies the specific criterion you indicate you are addressing. **If you cannot provide direct evidence of work you have done you must describe the work completely and in detail and include a confirmation that you have completed the work from either a supervisor or course syllabus.**

Send your completed chart and any documentation to the Assessment Center, DePaul University School for New Learning, 25 East Jackson, Chicago, IL 60604. You may submit the portfolio as a printed document or by email to SNLExams@depaul.edu. **Please submit completed chart in a Microsoft Word .doc format.** If you are submitting by email, scan the documents to substantiate your experience. You may prepare and submit the portfolio at any time. The portfolio will be examined for completeness and appropriateness. See page 5 for assessment requirements.

You will receive an assessment on the portfolio within four weeks of your submission.

DIRECTIONS: Clarification of kinds of evidence to include. Provide evidence for each criterion.

Criteria	Specifications for this Component of the Competency	Appropriate Evidence of Proficiency
Can apply mathematics or statistics to describe relationships between events in one's life.	Identifies various applications of mathematical or statistical techniques in describing or analyzing personal and/or social issues. Uses quantitative information effectively in working with data sets from many different disciplines.	Evidence of work completed in a project or in a position that applies quantitative reasoning in a minimum of two contexts.
Can explain how one's perspectives are influenced by mathematical language or reasoning.	Explains how mathematical and/or statistical concepts help interpret and reason with quantitative information. Analyzes various issues by making sense of the numbers that s/he comes across in modern life. Describes how the use of analytical approaches influences one's understanding of events. Writes critiques of quantitative arguments.	Evidence of decision-making in a position or research or course that applies quantitative reasoning.
Can interpret data, charts, and graphs.	Describes information contained in charts and graphs. Draws relevant implications from data sets. Organizes quantitative information and translates it into charts and graphs.	Evidence of application of data interpretation in a project or position or course.
Can solve problems using mathematical or statistical techniques.	Develops strategies for solving quantitative problems more effectively. Constructs logical arguments based on rules of inference. Uses simple calculations and estimates to put a perspective on situation(s) involving quantifiable information. Understands the difference between correlation and causality.	Evidence of decision-making based on quantitative analysis—in a position or project or course.
Can solve basic algebraic equations.	Uses algebraic formula and principles effectively to solve simple equations.	Evidence of application of algebra or statistics in a project or position or course.
Can use basic statistical concepts to characterize data.	Understands and reflects the difference among basic measures of central tendency (mean, median, mode, standard deviation) in working with data sets. Explains the principles of normal distribution and their relevance for interpreting events. Applies basic principles of statistical inference and probability to the assessment of common situations (lotteries, risk assessment, etc.).	Evidence of application of statistics in a project or position or course.

**Note: The criteria for this competence are stated in column 1.
You must provide evidence that your experience meets each of those criteria.**

EXAMPLE—HYPOTHETICAL STUDENT 1-06

L-6: Quantitative Reasoning Proficiency Portfolio

Can use mathematical symbols, concepts, and methods to describe and solve problems.

Name: _____ Walter Doe _____ Student ID Number: _____ 0001234 _____

Email address: _____ walterdoe@walterdoe.net _____ Phone Number: _____ 773-555-1234 _____

Date of Submission of Portfolio: _____ January 25th, 2006 _____

I am attaching the following documentation:

1. **Course description, Financial Statement Analysis**
2. **Business Plan, My Own Business—including information about setting up the business, sources used, actual plan.**
3. **Stock portfolio analysis, including explanation of basis for setting it up**
4. **Statement from Investment Group about the Portfolio Analysis, including description of the response by the group to my recommendations.**

Note—only three sources of evidence are required, but this example includes four to show that you may use a variety of kinds of experience.

Example—part 2.

Basis for My Assessment of My Proficiency in Quantitative Reasoning

Criteria	The Evidence I Am Submitting	How It Demonstrates that I Meet this Criterion
Can apply mathematics or statistics to describe relationships between events in one's life.	Financial Statement Analysis. FIN 220. Course Description: "The primary objective of the course is to teach the fundamentals of financial statement analysis to on-the-rise middle managers with a view towards using this tool in carrying out the strategies of the firm. This course is designed to take the mystery out of accounting financial statements and the financial planning process. The techniques learned in the course are useful when applied to a single project or when applied to the entire firm." University of Illinois, Autumn quarter, 2000 Grade: A	Three of the topics covered, the balance sheet, the income statement, and the cash flow statement helped me in the financial planning model of my own business. I have developed and carried out a business plan applying principles learned in the course.
Can explain how one's perspectives are influenced by mathematical language or reasoning.	Business plan for my own firm.	In my business plan, I have applied statistical analysis to determine the probability of success for the firm.
Can interpret data, charts, and graphs.	Paper analyzing performance of stocks in portfolio of investment group. Report submitted to Investment Group, January 2003. See letter from group reporting on value of the report—December 2004.	The analysis includes a variety of data sources, including individual company profiles and trend analyses provided by Standard and Pooors.
Can solve problems using mathematical or statistical techniques.	Accountant Smith and Associates February 2003 – August 2005	In my position as an accountant at Smith and Associates, PC, I was constantly put in the position of solving the financial problems of our clients and figuring out discrepancies in their tax results. I was able to successfully solve most problems with mathematical techniques.
Can solve basic algebraic equations.	Accountant Smith and Associates Chicago, IL February 2003 – August 2005	In my position as an accountant at Smith and Associates, PC I used EXCEL to analyze individual financial status, formulas that apply algebra and statistics. The trend analysis that I did for individuals particularly applied algebraic interpretation.
Can use basic statistical concepts to characterize data.	Annual Report, My Own Business	In the report I have used basic concepts—distribution, mean, median, mode, as well as trend analysis to analyze the firm's success.

Note: This example includes the same evidence in several categories. The example includes different explanations for the use of the same evidence to show that for example the work as an accountant relates specifically to each of the criteria for which it is listed.

Assessment Basis

The assessor for your exam will analyze your responses to each of the six components of this competence listed on the previous charts. Your submission must address all six components and provide evidence that your work or experience demonstrates that you meet each of the six criteria.

Students whose work does not meet the requirements will need to complete the Quantitative Reasoning course to meet this competence.