

Please cite as: Carmichael, J., Kelsch, A., Kubatova, A., Smart, K., & Zerr, R. (2015). Assessment of Essential Studies quantitative reasoning skills. University of North Dakota.

**ASSESSMENT RUBRIC**

Objectives	Unsatisfactory	Developing	Accomplished
	1	2	3
Confidence with mathematics: comfortable with quantitative ideas and at ease in applying quantitative methods	Student shows signs of reluctance to use quantitative analysis	Student uses quantitative analysis but may be uncomfortable doing so and doesn't always get correct results	Student is comfortable with quantitative ideas and at ease with quantitative methods and uses them correctly
Interpreting data: ability to reason with data, read graphs or maps, draw inferences, and recognize sources of errors	Interpretation of data is absent or incorrect	Interpretation of data contains some critical elements and relevant details, but some irrelevant information may also be included	Interpretation of data contains most or all critical elements and relevant details with no irrelevant data
Problem solving in context: uses appropriate mathematical and numerical tools to solve discipline specific problems	Unable to identify or apply appropriate mathematical or numerical tools to solve problems	Shows some ability to identify or apply appropriate mathematical or numerical tools to solve problems	Competently identifies and applies appropriate mathematical or numerical tools to solve problems
Number sense: ability to recognize whether or not proposed solutions are reasonable in context	Fails to recognize when proposed solutions are unreasonable	Recognizes when proposed solutions are unreasonable, but is unable correct them	Recognizes when proposed solutions are unreasonable and is able to correct them
Technology: uses appropriate calculator/computer technology to solve problems	Does not choose an appropriate technology	Chooses an appropriate technology but does not execute appropriate steps	Chooses an appropriate technology and implements most or all of the appropriate steps