

Mathematics & Quantitative Skills		Incomplete	Developing	Competent	Exceptional
Remembering & Understanding	Definitions, Terms, Discipline-Specific Vocabulary and Facts associated with subject material used correctly	Student shows no understanding of terms, definitions, notation, symbols, formulas, mathematical properties, and theorems. Unable to use terms and definitions correctly in the course of classroom conversation and presentation.	Student shows below average understanding of terms, definitions, notation, symbols, formulas, mathematical properties, and theorems. Has difficulty using terms and definitions correctly in the course of classroom conversation and presentation.	Student shows average understanding of terms, definitions, notation, symbols, formulas, mathematical properties, and theorems. Uses most terms and definitions correctly in the course of classroom conversation and presentation.	Student has exemplary understanding of terms, definitions, notation, symbols, formulas, mathematical properties, and theorems. Uses terms and definitions correctly in the course of classroom conversation and presentation.
Applying	Knowledge Application: Applies Definitions, Terms, Discipline-Specific Facts and Vocabulary in some sort of <i>Procedure or Concrete Application</i>	Student is unable to apply basic mathematical concepts pertinent to course. Unable to apply mathematical procedures, terms, notation, and formulas. Work is confused, illogical, and full of errors.	Student has difficulty applying mathematical concepts pertinent to course. Makes mistakes and incorrect usage of mathematical procedures, terms, notation, and formulas. Work shows some direction and logic with multiple errors.	Student demonstrates ability to apply mathematical concepts pertinent to course. Applies mathematical procedures, terms, notation, & formulas in mostly efficient manner. Work is direct, logical, & mostly error free.	Student applies mathematical concepts & also demonstrates elegance in the work. Applies mathematical procedures, terms, notation, and formulas in most efficient manner. Work is direct, logical, and error free.
Analyzing & Evaluating	Critical Thinking: Utilizes Discipline-Specific, Definitions, Terms, Facts. Applies them critically through organizational patterns: 1. Comparing & Contrasting 2. Classifying 3. Induction, 4. Deduction 5. Error Analysis 6. Constructing Support 7. Abstracting 8. Analyzing Multiple Perspectives	Student is unable to analyze any real world situations, nor recognizes the mathematical patterns and procedures that are applicable. Demonstrates little or no ability to integrate diverse mathematical concepts to approach problems and cannot choose a correct procedure or process from multiple possibilities.	Student analyzes few real world situations or recognizes the mathematical patterns and procedures that are applicable. Demonstrates limited ability to integrate diverse mathematical concepts to approach problems and only occasionally chooses a correct procedure or process from multiple possibilities.	Student analyzes real world situations, recognizing the mathematical patterns and procedures that are applicable. Integrates many diverse mathematical concepts to approach problems & able to choose a correct procedure or process from multiple possibilities, without always recognizing most efficient one.	Student analyzes real world situations, recognizes the mathematical patterns and procedures that are applicable. Integrates diverse mathematical concepts to approach problems; chooses most efficient procedure or process from multiple possibilities.
Creating	Advanced Application of Knowledge: Combines knowledge, process, & critical thinking to reach complex intellectual goal(s) using one: 1. Advanced Decision Making 2. Investigation 3. Experimental Inquiry 4. Problem Solving 5. Invention	Student's lack of knowledge of facts, procedures, and the types of critical thinking involved in applying math to the real world completely limits independent thought or scholarship in the subject area.	Student demonstrates some ability to extend knowledge beyond definitions, application, & critical thinking to independent scholarship, but has not developed the skills & knowledge necessary to think originally.	Student extends knowledge beyond definitions, application, and critical thinking to independent scholarship, but has not fully developed all the skills and knowledge necessary for full command of the subject matter.	Student extends knowledge beyond definitions, application, and masters critical thinking to achieve independent scholarship that demands multiple stages of development and original thought.

