## 7 University of Vermont <br> CATAMOUNT CORE CURRICULUM ASSESSMENT RUBRIC MATHEMATICS

## Please use the following criteria to determine the student's ability to meet the following learning outcomes:

|  | $1$ <br> Not Meeting Expectations | $2$ <br> Approaching Expectations | $\mathbf{3}$ Meeting Expectations | $4$ <br> Exceeding Expectations |
| :---: | :---: | :---: | :---: | :---: |
|  | Student demonstrates no ability to interpret information using mathematical reasoning. | Student attempts to use mathematical reasoning to interpret and draw reasonable and appropriate inferences to explain information presented in mathematical forms but draws incorrect inferences about the information's meaning. For example, the student attempts to explain the rationale for steps in solving an equation, but the student incorrectly applies the algebraic rule. | Student uses mathematical reasoning to interpret and draw reasonable and appropriate inferences to provide somewhat accurate explanations of information presented in mathematical forms but occasionally makes minor errors related to computations or units. For example, the student can accurately explain trend data shown in a graph but may miscalculate the slope of the trend line. | Student uses mathematical reasoning to interpret and draw reasonable and appropriate inferences to provide accurate explanations of information presented in mathematical forms. For example, the student can accurately explain the trend data shown in a graph. |
| Tally: |  |  |  |  |

Learning Outcome \#2: Students will give examples related to course materials that show how creativity is central to mathematical thinking.

|  | 1 <br> Not Meeting Expectations | Approaching Expectations | $3$ <br> Meeting Expectations | 4 <br> Exceeding Expectations |
| :---: | :---: | :---: | :---: | :---: |
|  | Student demonstrates no ability to use non-algorithmic thinking to answer quantitative questions. | Student attempts to use nonalgorithmic thinking to answer quantitative questions. For example, the student works to see a pattern, but is unable to name the pattern. | Student somewhat accurately uses non-algorithmic thinking to answer quantitative questions. For example, the student sometimes notices that a pattern exists and may be able to describe the pattern to extend it. | Student competently uses nonalgorithmic thinking to answer quantitative questions. For instance, the student can recognize and state patterns. |
| Tally: |  |  |  |  |

Learning Outcome \#3: Students will be able to demonstrate facility with core mathematical concepts by completing work at the introductory college level or beyond in one area of mathematics.

|  | 1 <br> Not Meeting Expectations | 2 <br> Approaching Expectations | $3$ <br> Meeting Expectations | 4 <br> Exceeding Expectations |
| :---: | :---: | :---: | :---: | :---: |
|  | Student demonstrates no ability to solve mathematical challenges. | Student struggles to solve mathematical challenges. For example, the student struggles to use basic algebraic rules. | Student somewhat competently solves mathematical challenges. For example, the student may be able to properly use algebraic rules. | Student competently solves mathematical challenges. For example, the student uses algebraic rules properly. |
| Tally: |  |  |  |  |

