



## Texas A&M University Core Curriculum Empirical & Quantitative Skills Computational Rubric

### Definition

The Texas Higher Education Coordinating Board states that the Texas Core Curriculum objective of Empirical & Quantitative Skills is "to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions."<sup>1</sup> Further, the American Association of Colleges & Universities (AAC&U) notes: "Individuals with strong QL [quantitative literacy] skills possess the ability to reason and solve quantitative problems from a wide array of authentic contexts and everyday life situations. They understand and can create sophisticated arguments supported by quantitative evidence and they can clearly communicate those arguments in a variety of formats (using words, tables, graphs, mathematical equations, etc., as appropriate)."<sup>2</sup>

### Framing Language

This rubric is designed to be applied to student-produced work (artifacts), from a range of disciplines and a variety of genres. Ideally, the artifact assessed with this rubric will be produced by an individual student; however, this rubric may also be applied to group projects. The application of this rubric requires students to document their calculations as opposed to, for example, only selecting a multiple-choice answer.

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<sup>1</sup> 19 Tex. Admin. Code §4.28 (2021).

<sup>2</sup> American Association of Colleges & Universities. (2009). *Quantitative literacy VALUE rubric*. <https://www.aacu.org/initiatives/value-initiative/value-rubrics/value-rubrics-quantitative-literacy>





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	Advanced 8	7	Competent 6	5	Developing 4	3	Beginner 2	1	Not Present 0
<b>Set Up</b>	Efficiently represents problem in its entirety.		Represented problem adequately but not in the most efficient or complete way.		Represented with some relationship to the problem.		Represented with little to no relationship to the problem.		No set up provided.
<b>Computation</b>	Calculations include no errors.		Calculations include few errors.		Calculations include some errors.		Calculations are inaccurate or inappropriate.		No calculation provided.
<b>Interpretation</b>	Results are competently and thoroughly interpreted with no errors.		Results are competently interpreted but with minor omissions or inaccuracies.		Results are partially or incorrectly represented.		Results are not interpreted in the context of the problem.		No results provided.

Adapted from the TAMU-developed Mathematics Empirical & Quantitative Skills Rubric (2014).

