

An Analysis of Examples in College Algebra Textbooks for Community Colleges:
Opportunities for Student Learning
Contributed Research Report

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ABSTRACT

We analyzed 348 examples from sections on graphing, logarithmic and exponential functions in seven College Algebra textbooks used in community colleges to have a deeper understanding of instructional materials available for students by disclosing what textbooks are offering. We analyzed (1) their cognitive demand, (2) the strategies available to control solutions, (3) the types of responses, and (4) the use of representations. We found that 10% of examples in these textbooks were at a high-level of cognitive demand and that strategies to control solutions were not frequently offered. About 50% of examples expected answer only. Symbols and numbers were the most common representations in the statement and solution, respectively. Given that students rely on examples when they meet difficulties doing homework, shortcomings highlight the need to modify the examples or supplement from outside sources if we want the textbooks to be more useful to students.