**Intermediate Algebra: A Functional Approach**
Kelly, Alibegovic, Noonan-Haele, Schoening, Cangelosi

This social-minded text opens with climate change, ends with climate change, and addresses issues of public health and income inequality in between. The sequence of problems generates intellectual need for students to develop important algebraic tools around functions and mathematical modeling: graphing linear equations, understanding the distributive property with algebraic expressions, solving systems of linear equations, reinforcing the algebra of exponents, understanding logarithms, solving quadratic equations, completing the square, and working with rational exponents. Students will see linear functions as modeling constant rates of change, exponential functions as modeling constant percent change, and quadratic functions as modeling constant acceleration. To drive home important modeling elements, the material introduces inverse functions and logarithms. Overall, the text sends a strong message to students that mathematics is a sense making tool that helps explain the world we live in.

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**Functions and their Rates of Change**
Chen, Gottlieb, Kelly, and the Preceptor Team

This rich mathematical story blends together elements of precalculus and calculus. This text has a sequence of problems that makes immediate progress on the essential question in calculus－how do we measure change? The narrative of the course includes explicit instruction on the important precalculus topics: functions, linear functions, exponential functions, polynomial functions, logarithmic functions, trigonometric functions, and inverse trigonometric functions. The core calculus pieces include topics from a typical introductory calculus course: differentiation, limits, optimization, related rates, indeterminate forms, integration, the fundamental theorem of calculus, applications of integrals, and introductory differential equations.

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Excited to connect with anyone who would use or extend these materials.