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|  | What does the **research** say about rigor in mathematics? |
| ***Analyze research statements on rigor to form your own definition.*** | **Reference** | **Resonates with you?** |
| **Yes** | **No** |
| Teaching the Common Core content using the Standards for Mathematical Practice to reach progressively higher levels of proficiency attains mathematical rigor.  | (Hull, Balka, & Harbin-Miles, 2013) |  |  |
| Rigorous tasks must provide entry points for all students, offer them well-defined opportunities to make connections to other mathematics, and include both opportunities and expectations for them to develop deeper understanding. | (NCTM, Summing Up, 2013) |  |  |
| Rigor refers to academic rigor—learning in which scholars demonstrate a thorough in-depth master of challenging tasks to depth mastery of challenging tasks to develop cognitive skills through reflective thought analysis problem thought, analysis, problem-solving solving, evaluation, or creativity.  | (Zimmerman, 1995) |  |  |
| Mathematical rigor is the depth of interconnecting concepts and the breadth of supporting skills students are expected to know and understand. | (Hull, Balka, & Harbin-Miles, 2013) |  |  |
| Effective, ongoing interaction between instruction and student reasoning and thinking about concepts, skills, and challenging tasks that result in a conscious, connected, and transferable body of valuable knowledge for every student. | (Hull, Balka, & Harbin-Miles, 2013) |  |  |
| Rigor is requiring students to demonstrate, justify, and apply mathematical ideas to various situations. Instruction should involve productive struggle and focus on mathematical ideas. | (Hiebert & Grouws, 2007) |  |  |
| Rigor is a process, not a problem. | (Blackbur & Williamson, 2009) |  |  |
| Rigor in mathematics is teaching and learning that is active, deep, and engaging. | (Marzano, 2014) |  |  |
| **Your definition:** |