

Ohio's High School Math Pathways

Rigor: Students use mathematical language to communicate effectively and describe their work with clarity and precision. Students demonstrate how, when and why their procedures work and why they are appropriate. Students can answer the question, "How do we know?"

Rigorous courses are...	vs.	Rigorous courses are not...
Defined by complexity, which is a measure of the thinking, action or knowledge that is needed to complete the task.		Characterized by difficulty, which is a measure of effort required to complete a task.
Measured in depth of understanding.		Measured by the amount of work.
Opportunities for precision in reasoning, language, definitions and notation that are sufficient to appropriate age/course.		Based on procedure alone.
Determined by students' processes.		Measured by assigning difficult problems.
Opportunities for students to make decisions in problem-solving.		Defined only by the resources used.
Opportunities to make connections.		Taught in isolation.
Supportive of the transfer of knowledge to new situations.		Repetitive.
Driven by students developing efficient explanations of solutions and why they work, providing opportunities for thinking and reasoning about contextual problems and situations.		Focused on getting an answer.
Defined by what the students do with what you give them.		Defined by what you give the students.