

Ohio Curriculum Matrix for Mathematics

Ohio Mathematics Benchmarks/Indicators Grade 7	Common Core Mathematics Domains/Standards Grade 7	National Essential Skills Study (NESS) Rankings Rank		NESS	OAT	Priority
<p>3. Describe differences between rational and irrational numbers; e.g., use technology to show that some numbers (rational) can be expressed as terminating or repeating decimals and others (irrational) as non-terminating and non-repeating decimals. <i>(There are no Benchmarks for this Indicator at this Grade Level)</i></p>	<p><u>The Number System</u> Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers. 2. Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers. d. Convert a rational number to a decimal using long division; know that the decimal form of a rational number terminates in 0s or eventually repeats.</p>	M35	Use the properties of real (rational and irrational) numbers and demonstrate understanding of ordering and absolute value.	M	L	M
<p>4. Use order of operations and properties to simplify numerical expressions involving integers, fractions and decimals. (Benchmark E)</p>	<p><u>Expressions & Equations</u> Use properties of operations to generate equivalent expressions. 1. Apply properties of operations as strategies to add, subtract, factor, and expand linear expressions with rational coefficients. 2. Understand that rewriting an expression in different forms in a problem context can shed light on the problem and how the quantities in it are related. <i>For example, $a + 0.05a = 1.05a$ means that “increase by 5%” is the same as “multiply by 1.05.”</i></p>	M7	Simplify and solve algebraic equations by identifying and using the correct order of operations and techniques necessary to carry out the solution.	H	H	H
<p>1. Select appropriate units for measuring derived measurements; e.g., miles per hour, revolutions per minute. (Benchmark A), (Benchmark J)</p>	<p><i>There is no Ohio Mathematics Learning Indicator-Common Core alignment.</i></p>	M13	Use the technique of dimensional analysis to convert units of measure (e.g., kilometers/hour to meters/minute) and apply ratios in real-world situations (e.g., scale drawings).	H	M	H