Michigan Alternative Content Standards - Mathematics

Essential Elements Mathematics for High School

Number and Quantity - The Real Number System	**1.** Determine the value of a quantity that is squared or cubed. EE.N-RN.1
Number and Quantity - Quantities	**1-3.** Express quantities to the appropriate precision of measurement. EE.N-Q.1-3
Number and Quantity - The Complex Number System	Number and Quantity - The Complex Number System
Use the commutative, associative, and distributive properties to add, subtract, and multiply whole numbers. EE.N.CN.2	**a.** Use the commutative, associative, and distributive properties to add, subtract, and multiply whole numbers. EE.N.CN.2
Solve real-world problems involving addition and subtraction of decimals, using models when needed. EE.N.CN.2	**b.** Solve real-world problems involving addition and subtraction of decimals, using models when needed. EE.N.CN.2
Solve real-world problems involving multiplication of decimals and whole numbers, using models when needed. EE.N.CN.2	**c.** Solve real-world problems involving multiplication of decimals and whole numbers, using models when needed. EE.N.CN.2
Algebra - Seeing Structure in Expressions	**1.** Identify an algebraic expression involving one arithmetic operation to represent a real-world problem. EE.A-SSE.1
	2. Not Applicable EE.A-SSE.2

	3. Solve simple algebraic equations with one variable using multiplication and division. EE.A-SSE.3
	4. Determine the successive term in a geometric sequence given the common ratio. EE.A-SSE.4
Algebra - Creating Equations	**1.** Create an equation involving one operation with one variable, and use it to solve a real-world problem. EE.A-CED.1
	2-4. Solve one-step inequalities. EE.A-CED.2-4
Algebra - Reasoning with Equations and Inequalities	**10-12.** Interpret the meaning of a point on the graph of a line. For example, on a graph of pizza purchases, trace the graph to a point and tell the number of pizzas purchased and the total cost of the pizzas. EE.A-REI.10-12
Functions - Interpreting Functions	**1-3.** Use the concept of function to solve problems. EE.F-IF.1-3
	4-6. Construct graphs that represent linear functions with different rates of change and interpret which is faster/slower, higher/lower, etc. EE.F-IF.4-6
Functions - Building Functions	**1.** Select the appropriate graphical representation (first quadrant) given a situation involving constant rate of change. EE.F-BF.1
	2. Determine an arithmetic sequence with whole numbers when provided a recursive rule. EE.F-BF.2
Functions - Linear, Quadratic, and Exponential Models	**1-3.** Model a simple linear function such as y = mx to show that these functions increase by equal amounts over equal intervals. EE.F-LE.1-3
Geometry - Congruence	**1.** Know the attributes of perpendicular lines, parallel lines, and line segments; angles; and circles. EE.G-CO.1
	2-3. Not Applicable EE.G-CO.2-3
	4-5. Given a geometric figure and a rotation, reflection, or translation of that figure, identify the components of the two figures that are congruent. EE.G-CO.4-5
	6-8. Identify corresponding congruent and similar parts of shapes. EE.G-CO.6-8
Geometry - Expressing Geometric Properties with Equations	**1-6.** Not Applicable EE.G-GPE.1-6
	7. Find perimeters and areas of squares and rectangles to solve real world problems. EE.G-GPE.7

Geometry - Geometric Measurement and Dimension	**1-3.** Make a prediction about the volume of a container, the area of a figure, and the perimeter of a figure, and then test the prediction using formulas or models. EE.G-GMD.1-3
	4. Identify the shapes of two dimensional cross-sections of three dimensional objects. EE.G-GMD.4
Geometry - Modeling with Geometry	**1-3.** Use properties of geometric shapes to describe real-life objects. EE.G-MG.1-3
Statistics and Probability - Interpreting Categorical and Quantitative Data	**1-2.** Given data, construct a simple graph (line, pie, bar, or picture) or table, and interpret the data. EE.S-ID.1-2
	3. Interpret general trends on a graph or chart. EE.S-ID.3
	4. Calculate the mean of a given data set (limit the number of data points to fewer than five). EE.S-ID.4
Statistics and Probability - Making Inferences and Justifying Conclusions	**1-2.** Determine the likelihood of an event occurring when the outcomes are equally likely to occur. EE.S-IC.1-2
Statistics and Probability - Conditional Probability and the Rules of Probability	**1-5.** Identify when events are independent or dependent. EE.S-CP.1-5