

Wyoming Department of Education Required Virtual Education Course Syllabus

Niobrara County School District # 1

Program Name	Wyoming Virtual Academy	Content Area	MA
Course ID	D-MTH-001AV2-APL	Grade Level	9-12
Course Name	Math Foundations I - Semester 1	# of Credits	0.5
SCED Code	02049B0.5012	Curriculum Type	K12 Inc

COURSE DESCRIPTION

Generally offered first semester. This course brings students up to grade level—helping students progress at their optimum pace through interactive instruction and assessment spanning third- to fifth-grade math skills. Carefully paced, guided instruction is accompanied by interactive practice that is engaging and accessible. Formative assessments help students understand areas of weakness and improve performance, while summative assessments chart progress and skill development. When used in combination with Math Foundations II (covering skills in grades 6 to 8), the courses effectively remediate computational skills and conceptual understanding needed to undertake high school-level math courses with confidence. This course is only offered to students in the Special Education Program or are currently being tested for the special education program.

WYOMING CONTENT AND PERFORMANCE STANDARDS

STANDARD#	BENCHMARK (Standard/Indicator) Use the Standards and Benchmarks as Spreadsheets
7.ns.1	Apply and extend previous understandings of addition and subtraction to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram.
7.ng.3	Solve real-world and mathematical problems involving area, volume and surface area of two- and three-dimensional objects composed of triangles, quadrilaterals, polygons, cubes, and right prisms.
7.ee.1	Apply properties of operations as strategies to add, subtract, factor, and expand linear expressions with rational coefficients.
7.ns.2	Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers.
7.ee.4	Use variables to represent quantities in a real-world or mathematical problem, and construct simple equations and inequalities to solve problems by reasoning about the quantities.
7.ns.2	Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers.
8.ns.1	Know that numbers that are not rational are called irrational. Understand informally that every number has a decimal expansion; the rational numbers are those with decimal expansions that terminate in 0's or eventually repeat. Know that other numbers are call irrational.
7.rp.1	Compute unit rates associated with ratios of fractions, including ratios of lengths, areas and other quantities measured in like or different units. For example, if a person walks $\frac{1}{2}$ mile in each $\frac{1}{4}$ hour, compute the unit rate as the complex fraction $(\frac{1}{2})/(\frac{1}{4})$ miles per hour, equivalently 2 miles per hour.

SCOPE AND SEQUENCE

UNIT OUTLINE	STANDARD#	OUTCOMES OBJECTIVES/STUDENT CENTERED GOALS
Unit 1: Understanding Numbers 1.01: Addition and Subtraction Regrouping through 1.01 Quiz		Students begin with a diagnostic to find out what they know. Then they learn about basic odd and even

		numbers, including solving by grouping, regrouping, word problems, identifying un-needed information, skip counting, and mental math.
1.02: Understanding Numbers through 1.02 Practice Checkpoint		Students begin with a diagnostic to find out what they know. Then they learn about basic odd and even numbers, including solving by grouping, regrouping, word problems, identifying un-needed information, skip counting, and mental math.
1.02 Quiz		Students begin with a diagnostic to find out what they know. Then they learn about basic odd and even numbers, including solving by grouping, regrouping, word problems, identifying un-needed information, skip counting, and mental math.
1.03: Ordering Numbers 1.03 Practice Checkpoint		Students begin with a diagnostic to find out what they know. Then they learn about basic odd and even numbers, including solving by grouping, regrouping, word problems, identifying un-needed information, skip counting, and mental math.
1.03 Quiz		Students begin with a diagnostic to find out what they know. Then they learn about basic odd and even numbers, including solving by grouping, regrouping, word problems, identifying un-needed information, skip counting, and mental math.
1.04: Fact Families through 1.04 Practice Checkpoint		Students begin with a diagnostic to find out what they know. Then they learn about basic odd and even numbers, including solving by grouping, regrouping, word problems, identifying un-needed information, skip counting, and mental math.
1.04 Quiz		Students begin with a diagnostic to find out what they know. Then they learn about basic odd and even numbers, including solving by grouping, regrouping, word problems, identifying un-needed information, skip counting, and mental math.
1.05: Using Mental Math through 1.05 Practice Checkpoint		Students begin with a diagnostic to find out what they know. Then they learn about basic odd and even numbers, including solving by grouping, regrouping, word problems, identifying un-needed information, skip counting, and mental math.

<p>1.05 Quiz</p>		<p>Students begin with a diagnostic to find out what they know. Then they learn about basic odd and even numbers, including solving by grouping, regrouping, word problems, identifying un-needed information, skip counting, and mental math.</p>
<p>1.06: Choosing the Operation through 1.06 Practice Checkpoint</p>		<p>Students begin with a diagnostic to find out what they know. Then they learn about basic odd and even numbers, including solving by grouping, regrouping, word problems, identifying un-needed information, skip counting, and mental math.</p>
<p>1.06 Quiz</p>		<p>Students begin with a diagnostic to find out what they know. Then they learn about basic odd and even numbers, including solving by grouping, regrouping, word problems, identifying un-needed information, skip counting, and mental math.</p>
<p>1.07: Adding Numbers Horizontally through 1.07 Practice Checkpoint</p>		<p>Students begin with a diagnostic to find out what they know. Then they learn about basic odd and even numbers, including solving by grouping, regrouping, word problems, identifying un-needed information, skip counting, and mental math.</p>
<p>1.07 Quiz</p>		<p>Students begin with a diagnostic to find out what they know. Then they learn about basic odd and even numbers, including solving by grouping, regrouping, word problems, identifying un-needed information, skip counting, and mental math.</p>
<p>1.08: Extra Information through 1.08 Practice Checkpoint</p>		<p>Students begin with a diagnostic to find out what they know. Then they learn about basic odd and even numbers, including solving by grouping, regrouping, word problems, identifying un-needed information, skip counting, and mental math.</p>
<p>1.08 Quiz 1.09 Unit 1 Assignment</p>		<p>Students begin with a diagnostic to find out what they know. Then they learn about basic odd and even numbers, including solving by grouping, regrouping, word problems, identifying un-needed information, skip counting, and mental math.</p>
<p>1.10 Unit 1 Test</p>	<p>7.ns.1, 7.ng.3</p>	<p>Students begin with a diagnostic to find out what they know. Then they learn about basic odd and even numbers, including solving by grouping, regrouping, word problems,</p>

		identifying un-needed information, skip counting, and mental math.
Unit 2: Adding and Subtracting 2.01: Standard and Nonstandard Measures through 2.01 Practice Checkpoint		Students begin with a diagnostic to find out what they know. Then they review addition and subtraction, graphs and charts, and understanding and solving word problems.
2.01 Quiz		Students begin with a diagnostic to find out what they know. Then they review addition and subtraction, graphs and charts, and understanding and solving word problems.
2.02: Using Graphs and Charts through 2.02 Practice Checkpoint		Students begin with a diagnostic to find out what they know. Then they review addition and subtraction, graphs and charts, and understanding and solving word problems.
2.02 Quiz		Students begin with a diagnostic to find out what they know. Then they review addition and subtraction, graphs and charts, and understanding and solving word problems.
2.03: Addition with Regrouping through 2.04 Practice Checkpoint		Students begin with a diagnostic to find out what they know. Then they review addition and subtraction, graphs and charts, and understanding and solving word problems.
2.03 Quiz through 2.04 Quiz		Students begin with a diagnostic to find out what they know. Then they review addition and subtraction, graphs and charts, and understanding and solving word problems.
2.05: Perimeter through 2.05 Practice Checkpoint		Students begin with a diagnostic to find out what they know. Then they review addition and subtraction, graphs and charts, and understanding and solving word problems.
2.05 Quiz		Students begin with a diagnostic to find out what they know. Then they review addition and subtraction, graphs and charts, and understanding and solving word problems.
2.06: Subtraction with Regrouping through 2.07 Practice Checkpoint		Students begin with a diagnostic to find out what they know. Then they review addition and subtraction, graphs and charts, and understanding and solving word problems.
2.07 Quiz		Students begin with a diagnostic to find out what they know. Then they review addition and subtraction, graphs and

		charts, and understanding and solving word problems.
2.08: Deciding When to Regroup through 2.08 Practice Checkpoint		Students begin with a diagnostic to find out what they know. Then they review addition and subtraction, graphs and charts, and understanding and solving word problems.
2.08 Quiz 2.09 Unit 2 Assignment		Students begin with a diagnostic to find out what they know. Then they review addition and subtraction, graphs and charts, and understanding and solving word problems.
2.10 Unit 2 Test	7.ns.1, 7.ee.1	Students begin with a diagnostic to find out what they know. Then they review addition and subtraction, graphs and charts, and understanding and solving word problems.
Unit 3: Measurement and Multiplication 3.01: Mean, Median, Mode, and Range through 3.01 Practice Checkpoint		Students begin with a diagnostic to find out what they know. Then they review how to find the mean, median, mode, and range, as well as area, then they begin an introduction to multiplication.
3.01 Quiz		Students begin with a diagnostic to find out what they know. Then they review how to find the mean, median, mode, and range, as well as area, then they begin an introduction to multiplication.
3.02: Capacity, Time, and Weight through 3.02 Practice Checkpoint		Students begin with a diagnostic to find out what they know. Then they review how to find the mean, median, mode, and range, as well as area, then they begin an introduction to multiplication.
3.02 Quiz		Students begin with a diagnostic to find out what they know. Then they review how to find the mean, median, mode, and range, as well as area, then they begin an introduction to multiplication.
3.03: Finding Needed Facts through 3.03 Practice Checkpoint		Students begin with a diagnostic to find out what they know. Then they review how to find the mean, median, mode, and range, as well as area, then they begin an introduction to multiplication.
3.03 Quiz		Students begin with a diagnostic to find out what they know. Then they review how to find the mean, median, mode, and range, as well as area,

		then they begin an introduction to multiplication.
3.04: Introduction to Multiplication through 3.04 Practice Checkpoint		Students begin with a diagnostic to find out what they know. Then they review how to find the mean, median, mode, and range, as well as area, then they begin an introduction to multiplication.
3.04 Quiz		Students begin with a diagnostic to find out what they know. Then they review how to find the mean, median, mode, and range, as well as area, then they begin an introduction to multiplication.
3.05: Multiplying by 2,3,4,5 through 3.05 Practice Checkpoint		Students begin with a diagnostic to find out what they know. Then they review how to find the mean, median, mode, and range, as well as area, then they begin an introduction to multiplication.
3.05: Multiplying by 2,3,4,5 3.05 Quiz		Students begin with a diagnostic to find out what they know. Then they review how to find the mean, median, mode, and range, as well as area, then they begin an introduction to multiplication.
3.06: Multiplying by 6,7,8,9,10,100 through 3.06 Practice Checkpoint		Students begin with a diagnostic to find out what they know. Then they review how to find the mean, median, mode, and range, as well as area, then they begin an introduction to multiplication.
3.06 Quiz		Students begin with a diagnostic to find out what they know. Then they review how to find the mean, median, mode, and range, as well as area, then they begin an introduction to multiplication.
3.07: Multiplying Three Numbers through 3.07 Practice Checkpoint		Students begin with a diagnostic to find out what they know. Then they review how to find the mean, median, mode, and range, as well as area, then they begin an introduction to multiplication.
3.07 Quiz		Students begin with a diagnostic to find out what they know. Then they review how to find the mean, median, mode, and range, as well as area, then they begin an introduction to multiplication.
3.08: Area through 3.08 Practice Checkpoint		Students begin with a diagnostic to find out what they know. Then they review how to find the mean, median,

		mode, and range, as well as area, then they begin an introduction to multiplication.
3.08 Quiz 3.09 Unit 3 Assignment		Students begin with a diagnostic to find out what they know. Then they review how to find the mean, median, mode, and range, as well as area, then they begin an introduction to multiplication.
3.10 Unit 3 Test	7.ns.2, 7.ee.4	Students begin with a diagnostic to find out what they know. Then they review how to find the mean, median, mode, and range, as well as area, then they begin an introduction to multiplication.
Unit 4: Division and Data 4.01: Introduction to Division through 4.01 Practice Checkpoint		Students begin with a diagnostic to find out what they know. Then they learn about the properties of division, multi-step word problems, conclusions and predications and more.
4.01 Quiz		Students begin with a diagnostic to find out what they know. Then they learn about the properties of division, multi-step word problems, conclusions and predications and more.
4.02: Division: Opposite Multiplication through 4.02 Practice Checkpoint		Students begin with a diagnostic to find out what they know. Then they learn about the properties of division, multi-step word problems, conclusions and predications and more.
4.02 Quiz		Students begin with a diagnostic to find out what they know. Then they learn about the properties of division, multi-step word problems, conclusions and predications and more.
4.03: Dividing by 2,3,4,5 through 4.03 Practice Checkpoint		Students begin with a diagnostic to find out what they know. Then they learn about the properties of division, multi-step word problems, conclusions and predications and more.
4.03 Quiz		Students begin with a diagnostic to find out what they know. Then they learn about the properties of division, multi-step word problems, conclusions and predications and more.
4.04: Multistep Word Problems through 4.04 Practice Checkpoint		Students begin with a diagnostic to find out what they know. Then they learn about the properties of division,

		multi-step word problems, conclusions and predications and more.
4.04 Quiz		Students begin with a diagnostic to find out what they know. Then they learn about the properties of division, multi-step word problems, conclusions and predications and more.
4.05: Dividing by 6,7,8,9 through 4.05 Practice Checkpoint		Students begin with a diagnostic to find out what they know. Then they learn about the properties of division, multi-step word problems, conclusions and predications and more.
4.05 Quiz		Students begin with a diagnostic to find out what they know. Then they learn about the properties of division, multi-step word problems, conclusions and predications and more.
4.06: Long Division through 4.06 Practice Checkpoint		Students begin with a diagnostic to find out what they know. Then they learn about the properties of division, multi-step word problems, conclusions and predications and more.
4.06 Quiz		Students begin with a diagnostic to find out what they know. Then they learn about the properties of division, multi-step word problems, conclusions and predications and more.
4.07: Conclusions and Predictions through 4.07 Practice Checkpoint		Students begin with a diagnostic to find out what they know. Then they learn about the properties of division, multi-step word problems, conclusions and predications and more.
4.07 Quiz		Students begin with a diagnostic to find out what they know. Then they learn about the properties of division, multi-step word problems, conclusions and predications and more.
4.08: Expressing Numbers through 4.08 Practice Checkpoint		Students begin with a diagnostic to find out what they know. Then they learn about the properties of division, multi-step word problems, conclusions and predications and more.
4.08 Quiz		Students begin with a diagnostic to find out what they know. Then they learn about the properties of division,

		multi-step word problems, conclusions and predications and more.
4.09: Data Collection through 4.09 Practice Checkpoint		Students begin with a diagnostic to find out what they know. Then they learn about the properties of division, multi-step word problems, conclusions and predications and more.
4.09 Quiz 4.10 Unit 4 Assignment		Students begin with a diagnostic to find out what they know. Then they learn about the properties of division, multi-step word problems, conclusions and predications and more.
4.11 Unit 4 Test	7.ns.2, 7.ee.1, 8.ns.1	Students begin with a diagnostic to find out what they know. Then they learn about the properties of division, multi-step word problems, conclusions and predications and more.
Unit 5: Fractions and Geometry 5.01: Introduction to Fractions through 5.01 Practice Checkpoint		Students begin with a diagnostic to find out what they know. Then they learn about fractions, comparing like fractions, simplifying fractions, and finding common denominators. They learn about comparing and ordering mixed numbers and converting mixed numbers.
5.01 Quiz		Students begin with a diagnostic to find out what they know. Then they learn about fractions, comparing like fractions, simplifying fractions, and finding common denominators. They learn about comparing and ordering mixed numbers and converting mixed numbers.
5.02: Parts of a Set through 5.02 Practice Checkpoint		Students begin with a diagnostic to find out what they know. Then they learn about fractions, comparing like fractions, simplifying fractions, and finding common denominators. They learn about comparing and ordering mixed numbers and converting mixed numbers.
5.02 Quiz		Students begin with a diagnostic to find out what they know. Then they learn about fractions, comparing like fractions, simplifying fractions, and finding common denominators. They learn about comparing and ordering mixed numbers and converting mixed numbers.

<p>5.03: Equivalent Fractions through 5.03 Practice Checkpoint</p>		<p>Students begin with a diagnostic to find out what they know. Then they learn about fractions, comparing like fractions, simplifying fractions, and finding common denominators. They learn about comparing and ordering mixed numbers and converting mixed numbers.</p>
<p>5.03: Equivalent Fractions 5.03 Quiz</p>		<p>Students begin with a diagnostic to find out what they know. Then they learn about fractions, comparing like fractions, simplifying fractions, and finding common denominators. They learn about comparing and ordering mixed numbers and converting mixed numbers.</p>
<p>5.04: Adding and Subtracting Fractions through 5.05 Practice Checkpoint</p>		<p>Students begin with a diagnostic to find out what they know. Then they learn about fractions, comparing like fractions, simplifying fractions, and finding common denominators. They learn about comparing and ordering mixed numbers and converting mixed numbers.</p>
<p>5.04: Adding and Subtracting Fractions through 5.05 Quiz</p>		<p>Students begin with a diagnostic to find out what they know. Then they learn about fractions, comparing like fractions, simplifying fractions, and finding common denominators. They learn about comparing and ordering mixed numbers and converting mixed numbers.</p>
<p>5.06: Decimals through 5.06 Practice Checkpoint</p>		<p>Students begin with a diagnostic to find out what they know. Then they learn about fractions, comparing like fractions, simplifying fractions, and finding common denominators. They learn about comparing and ordering mixed numbers and converting mixed numbers.</p>
<p>5.06 Quiz</p>		<p>Students begin with a diagnostic to find out what they know. Then they learn about fractions, comparing like fractions, simplifying fractions, and finding common denominators. They learn about comparing and ordering mixed numbers and converting mixed numbers.</p>
<p>5.07: Adding and Subtracting Decimals through 5.07 Practice Checkpoint</p>		<p>Students begin with a diagnostic to find out what they know. Then they learn about fractions, comparing like fractions, simplifying fractions, and finding common denominators. They learn about comparing and ordering</p>

		mixed numbers and converting mixed numbers.
5.07 Quiz		Students begin with a diagnostic to find out what they know. Then they learn about fractions, comparing like fractions, simplifying fractions, and finding common denominators. They learn about comparing and ordering mixed numbers and converting mixed numbers.
5.08: Probability through 5.08 Practice Checkpoint		Students begin with a diagnostic to find out what they know. Then they learn about fractions, comparing like fractions, simplifying fractions, and finding common denominators. They learn about comparing and ordering mixed numbers and converting mixed numbers.
5.08 Quiz		Students begin with a diagnostic to find out what they know. Then they learn about fractions, comparing like fractions, simplifying fractions, and finding common denominators. They learn about comparing and ordering mixed numbers and converting mixed numbers.
5.09: Lines, Rays, and Segments through 5.09 Practice Checkpoint		Students begin with a diagnostic to find out what they know. Then they learn about fractions, comparing like fractions, simplifying fractions, and finding common denominators. They learn about comparing and ordering mixed numbers and converting mixed numbers.
5.09 Quiz		Students begin with a diagnostic to find out what they know. Then they learn about fractions, comparing like fractions, simplifying fractions, and finding common denominators. They learn about comparing and ordering mixed numbers and converting mixed numbers.
5.10: Plane Figures through 5.10 Practice Checkpoint		Students begin with a diagnostic to find out what they know. Then they learn about fractions, comparing like fractions, simplifying fractions, and finding common denominators. They learn about comparing and ordering mixed numbers and converting mixed numbers.
5.10 Quiz		Students begin with a diagnostic to find out what they know. Then they learn about fractions, comparing like

		fractions, simplifying fractions, and finding common denominators. They learn about comparing and ordering mixed numbers and converting mixed numbers.
5.11: Solids through 5.11 Practice Checkpoint		Students begin with a diagnostic to find out what they know. Then they learn about fractions, comparing like fractions, simplifying fractions, and finding common denominators. They learn about comparing and ordering mixed numbers and converting mixed numbers.
5.11 Quiz		Students begin with a diagnostic to find out what they know. Then they learn about fractions, comparing like fractions, simplifying fractions, and finding common denominators. They learn about comparing and ordering mixed numbers and converting mixed numbers.
5.12: Ordered Pairs through 5.12 Practice Checkpoint		Students begin with a diagnostic to find out what they know. Then they learn about fractions, comparing like fractions, simplifying fractions, and finding common denominators. They learn about comparing and ordering mixed numbers and converting mixed numbers.
5.12 Quiz		Students begin with a diagnostic to find out what they know. Then they learn about fractions, comparing like fractions, simplifying fractions, and finding common denominators. They learn about comparing and ordering mixed numbers and converting mixed numbers.
5.13: Logical Reasoning through 5.13 Practice Checkpoint		Students begin with a diagnostic to find out what they know. Then they learn about fractions, comparing like fractions, simplifying fractions, and finding common denominators. They learn about comparing and ordering mixed numbers and converting mixed numbers.
5.13 Quiz 5.14 Unit 5 Assignment		Students begin with a diagnostic to find out what they know. Then they learn about fractions, comparing like fractions, simplifying fractions, and finding common denominators. They learn about comparing and ordering mixed numbers and converting mixed numbers.

5.15 Unit 5 Test	7.rp.1	Students begin with a diagnostic to find out what they know. Then they learn about fractions, comparing like fractions, simplifying fractions, and finding common denominators. They learn about comparing and ordering mixed numbers and converting mixed numbers.
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