

# CONRADY EIGHTH GRADE INSTRUCTIONAL MATH CURRICULUM MAP 2018 - 2019

Unit	Standards	Supporting/ Grade level Standards	Grade level Standards	Estimated Time
#1 Expressions & Equations	<b>8.EE.7</b> (Solve linear equations in one variable)	<p><b>6.EE.A.1:</b> Write and evaluate numerical expressions involving whole-number exponents.</p> <p><b>6.EE.B.7:</b> Solve real-world and mathematical problems by writing and solving equations of the form <math>x + p = q</math> and <math>px = q</math> for cases in which <math>p</math>, <math>q</math> and <math>x</math> are all nonnegative rational numbers.</p> <p><b>6.EE.B.6:</b> Use variables to represent numbers and write expressions when solving a real-world or mathematical problem; understand that a variable can represent an unknown number, or, depending on the purpose at hand, any number in a specified set.</p> <p><b>7.EE.B.4:</b> 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</p>	Solving Equations	Q1 20 days 1 Quiz
#2 Exponents & Scientific Notation	<b>8.EE.1</b> (Integer exponents) <b>8.EE.3</b> (Very small and very large quantities) <b>8.EE.4</b> (Scientific notation)	<p><b>6.EE.A.1</b> <b>Write and evaluate numerical expressions involving whole-number exponents.</b></p> <p><b>5.NBT.A.</b>Use whole-number exponents to denote powers of 10.</p> <p>5.NBT.B.5</p> <p>Fluently multiply multi-digit <u>whole numbers</u> using the standard algorithm.</p>	Exponent Rules Scientific Notation	Q1 20 Days

<p>#3 Linear Relationships</p>	<p><b>8.EE.5</b> (Graph and compare proportional relationships) <b>8.EE.6</b> (Use similar triangles to explain slope)</p>	<p>6.RP.A.2</p> <p><b>Understand the concept of a unit rate <math>a/b</math> associated with a ratio <math>a:b</math> with <math>b \neq 0</math>, and use rate language in the context of a ratio relationship</b></p> <p>6.RP.A.3.c</p> <p>Find a percent of a quantity as a rate per 100 (e.g., 30% of a quantity means 30/100)</p>	<p>Proportional Relationships, lines, and linear equations</p>	<p>Q2 20 Days Test</p>
<p>#4 Congruence &amp; Similarity</p>	<p><b>8.G.1</b> (Verify properties of transformations) <b>8.G.2</b> (Understand congruence using transformation) <b>8.G.3</b> (Describe effects of transformations in plane) <b>8.G.4</b> (Understand similarity using transformation) <b>8.G.5</b> (Angles, parallel lines cut by transversal) <b>8.EE.6</b> (Use similar triangles to explain slope)</p>	<p>4.MD.C.7 (8G1)</p> <p>Recognize angle measure as additive.</p> <p>7.G.B.5 (8G1)</p> <p>Use facts about supplementary, complementary, vertical, and adjacent angles in a multi-step problem to write and solve simple equations for an unknown angle in a figure.</p> <p>7.G.B.5 (8G2)</p> <p>Use facts about supplementary, complementary, vertical, and adjacent angles in a multi-step problem to write and solve simple equations for an unknown angle in a figure.</p>	<p>Congruence (9.1-9.4) Similarity (10.1-10.4)</p> <p>Reasoning in Geometry</p>	<p>Q2 20 Days Test</p>

		<p>6.G.A.3 ( 8G3)</p> <p>Draw polygons in the coordinate plane given coordinates for the vertices;</p> <p>5.G.A.2(8G3)</p> <p>Represent real world and mathematical problems by graphing points in the first quadrant of the coordinate plane, and interpret coordinate values of points in the context of the situation.</p> <p>6.G.A.3 (8G4)</p> <p>Draw polygons in the coordinate plane given coordinates for the vertices;</p> <p>None for (8G5)</p> <p>6.G.A.1 (8EE6)</p> <p>Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes;</p>		
#5 Functions	<p><b>8.F.1</b> (Understand functions)</p> <p><b>8.F.2</b> (Compare properties of functions)</p> <p><b>8.F.3</b> (Linear functions)</p> <p><b>8.F.4</b> (Construct &amp; interpret linear functions)</p> <p><b>8.F.5</b> (Describe functional</p>	<p><u>8F1 (none)</u></p> <p><b>6.RP.A.3.c (8F2)</b> Find a percent of a quantity as a rate per 100 (e.g., 30% of a quantity means 30/100)</p> <p>7.G Circumference of a Circle (8F3) Draw circles with diameters as indicated below and</p>	<p>Defining and Comparing Functions</p> <p><u>Digits Topic 8:</u> Linear Equations (8.1-8.6) 6 days</p>	<p>Q3 20 Days</p> <p>Test</p>

	relationships)	<p>measure their circumferences to complete the following table. (8F3)</p> <p>6.RP.A.2 (8F4) <b>Understand the concept of a unit rate <math>a/b</math> associated with a ratio <math>a:b</math> with <math>b \neq 0</math>, and use rate language in the context of a ratio relationship.</b></p> <p>7.RP.A.2 (8F5) <b>Recognize and represent proportional relationships between quantities.</b></p>		
#6 Systems of Linear Equations	<b>8.EE.8</b> (Pairs of simultaneous linear equations)		<u>Digits Topic 6: System of Two Linear Equations</u> (6.1-6.7) 7 days Non Digits 10 days	Q3 20 days
#7 Real Numbers	<b>8.NS.1</b> (Decimal expansions and irrational numbers) <b>8.NS.2</b> (Compare values of irrational numbers) <b>8.EE.2</b> (Square root and cube roots)		Non Digits 7 Days	Q4 20 Days
#8 Pythagorean Theorem	<b>8.G.6</b> (Proof of Pythagorean Theorem) <b>8.G.7</b> (Apply Pythagorean Theorem to determine unknown side length) <b>8.G.8</b> (Apply Pythagorean Theorem to find distance between points)		<u>Digits Topic 12: Using the Pythagorean Theorem</u> (12.1-12.6) 6 Days	Q4 8 days