



**North Carolina State Math Objectives /Excel Math Correlation  
Grade 6**

<b>NORTH CAROLINA MATH OBJECTIVES</b>	<b>Excel Math Lesson Numbers</b>	<b>Excel Math Stretch # Activity Number</b>
<b>Strand: Number and Operations</b>		
<b>COMPETENCY GOAL 1: The learner will understand and compute with rational numbers.</b>		
<b>1.01 Develop number sense for negative rational numbers.</b>		
a) Connect the model, number word, and number using a variety of representations, including the number line.	63, 109, 130, 131, 143, 144, 145	
b) Compare and order.	63, 109, 119 Add / Subtract: 130, 131, 143, 144 Multiply / Divide: 155	
c) Make estimates in appropriate situations.	63, *155	
<b>1.02 Develop meaning for percents.</b>		
a) Connect the model, number word, and number using a variety of representations.	44, 52, *67, *71, 94, 97, 98, 105, 110, 111, 113, 116, 119, 127, 129, 133, 135, 140	*48, *143, *152 Activity 4, 6
b) Make estimates in appropriate situations.	97, 98, 65, 110, 133, 140	*48, 143, 152 Activity 4, 6
1.03 Compare and order rational numbers.	2, 5, 16, 19, 22, 24, 27, 35, 46, 47, 49, 53, 54, 57, 73, 74, 95, 119, 123, 128, 129, 135	3, 20, 23, 29, 31, 32, 36, 66, 72, 75, 81, 88, 144, 153
<b>1.04 Develop fluency in addition, subtraction, multiplication, and division of nonnegative rational numbers.</b>		
a) Analyze computational strategies.	3, 4, 5, 6, 8, 9, 12, 16, 18, 19, 20, 24, 26, 28, 31, 34, 38, 39, 40, 41, 42, 51, 52, 57, 58, 62, 65, 67, 69, 72, 91, 92, 93, 96, 98, 101, 102, 103, 104, 106, 107, 110, 112, 117, 118, 120, 122, 126, 128, 132, 134, 136, 138, 142, 146, 147, 149, 151, 152, 153, 154	1, 25, 31, 32, 44, 46, 47, 48, 49, 50, 52, 54, 55, 59, 62, 63, 66, 67, 68, 69, 70, 74, 75, 76, 78, 82, 83, 85, 86, 87, 96, 98, 101, 102, 103, 104, 110, 113, 115, 117, 123, 124, 128, 130, 132, 133, 142, 143, 155
b) Describe the effect of operations on size.	3, 4, 5, 6, 8, 9, 12, 16, 18, 19, 20, 24, 26, 28, 31, 34, 38, 39, 40, 41, 42, 51, 52, 57, 58, 62, 65, 67, 69, 72, 91, 92, 93, 96, 98, 101, 102, 103, 104, 106, 107, 110, 112, 117, 118, 120, 122, 126, 128, 132, 134, 136, 138, 142, 146, 147, 149, 151, 152, 153, 154	1, 25, 31, 32, 44, 46, 47, 48, 49, 50, 52, 54, 55, 59, 62, 63, 66, 67, 68, 69, 70, 74, 75, 76, 78, 82, 83, 85, 86, 87, 96, 98, 101, 102, 103, 104, 110, 113, 115, 117, 123, 124, 128, 130, 132, 133, 142, 143, 155
c) Estimate the results of computations.	20, 42, 58, 61, 103, 108, 123, 134, 147, 154 Averages: 55, 120	1, 48, 68, 69, 72, 73, 76, 78, 82, 83, 102 Averages: 47 Median: Activity 10
d) Judge the reasonableness of solutions.	20, 42, 58, 61, 103, 108, 123, 134, 147, 154 Averages: 55, 120	1, 48, 68, 69, 72, 73, 76, 78, 82, 83, 102



**North Carolina State Math Objectives /Excel Math Correlation  
Grade 6**

<b>NORTH CAROLINA MATH OBJECTIVES</b>	<b>Excel Math Lesson Numbers</b>	<b>Excel Math Stretch # Activity Number</b>
1.05 Develop fluency in the use of factors, multiples, exponential notation, and prime factorization.	1, *8, 9, 17, 24, 26, 50, 54, 56, 61, 64, 72, 102, 103, 107, 132, 155	67, 72, 88, 90, 99, 139, 141 Activity 11
1.06 Use exponential, scientific, and calculator notation to write very large and very small numbers.	24, *58, *61, 102	*74, *76, *111, 141 Activity 12
1.07 Develop flexibility in solving problems by selecting strategies and using mental computation, estimation, calculators or computers, and paper and pencil.	1, 3, 4, 5, 6, 7, 8, 9, 13, 19, 20, 31, 33, 39, 40, 42, 43, 48, 54, 55, 61, 65, 67, 69, 70, 72, 76, 92, 94, 96, 97, 99, 105, 108, 110, 115, 117, 120, 127, 133, 137, 140, 141, 151, 152, 153, 154 Patterns: 21, 33, 149	1, 2, 3, 6, 7, 9, 10, 12, 13, 15, 16, 17, 18, 20, 21, 24, 25, 26, 28, 30, 35, 37, 38, 39, 41, 42, 43, 44, 45, 46, 47, 48, 50, 51, 52, 54, 55, 56, 57, 58, 59, 60, 61, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 90, 91, 92, 93, 94, 95, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 112, 113, 114, 115, 117, 120, 122, 123, 124, 125, 126, 127, 128, 130, 133, 134, 135, 136, 137, 138, 139, 140, 143, 145, 148, 149, 150, 151, 152, 153, 154 Activity 9, 11, 12, 13, 14
<b>Strand: Measurement</b>		
<b>COMPETENCY GOAL 2: The learner will select and use appropriate tools to measure two- and three-dimensional figures.</b>		
2.01 Estimate and measure length, perimeter, area, angles, weight, and mass of two- and three-dimensional figures, using appropriate tools.	10, 11, 25, 30, 33, 36, 75, 100, 115, 121, 124, 139, 148 Identify figures: 14, 15, 21	16, 28, 41, 54, 55, 56, 59, 63, 136 Activity 1, 2, 3, 4
2.02 Solve problems involving perimeter/circumference and area of plane figures.	30, 75, 76, 100, 121, 124, 125, 139, 148	28, 39, 55, 56, 63, 77, 84, 89, 118 Distance; 48 Activity 1, 2, 3, 4, 5
<b>Strand: Geometry</b>		
<b>COMPETENCY GOAL 3: The learner will understand and use properties and relationships of geometric figures in the coordinate plane.</b>		
3.01 Identify and describe the intersection of figures in a plane.	14, 25, 45, 68	33, 43, 52, 56, 63 Activity 7, 8
3.02 Identify the radius, diameter, chord, center, and circumference of a circle; determine the relationships among them.	60, 125	55, Volume: 59 Activity 1, 3 Density / Range: Activity 13, 14



**North Carolina State Math Objectives /Excel Math Correlation  
Grade 6**

<b>NORTH CAROLINA MATH OBJECTIVES</b>	<b>Excel Math Lesson Numbers</b>	<b>Excel Math Stretch # Activity Number</b>
3.03 Transform figures in the coordinate plane and describe the transformation.	23, *68, 76, *145	Non-coordinate plane: 14, 51, 61, 71, 100, 107, 108, 109, 116, 119, 121, 129, 131 Activity 6, 7, 8
3.04 Solve problems involving geometric figures in the coordinate plane.	*32, 36, 68, *70, 76, 115, 145 Measurement conversions: 11, 126, 137, 141	Non-coordinate: 45, 51, 52, 53, 56, 57, 58, 64, 71, 109, 118, 120 Activity 6, 7, 8 Conversions: 74, 111
<b>Strand: Data Analysis and Probability</b>		
<b>COMPETENCY GOAL 4: The learner will understand and determine probabilities.</b>		
4.01 Develop fluency with counting strategies to determine the sample space for an event. Include lists, tree diagrams, frequency distribution tables, permutations, combinations, and the Fundamental Counting Principle.	4, 8, 9, 13, 15, 40, 41, 43, 55, 65, 69, 70, 92, 150	4, 17, 19, 33, 34, 40, 41, 43, 45, 50, 51, 52, 57, 58, 60, 64, 65, 66, 67, 69, 70, 71, 75, 76, 79, 80, 81, 85, 91, 97, 135, 146, 149, 153, 154 Activity 9, 11, 12 Median: Activity 10
4.02 Use a sample space to determine the probability of an event.	34, *69, 97, 99, 133, 150	19, *79, 138, 146, 147
<b>Strand: Algebra</b>		
<b>COMPETENCY GOAL 5: The learner will demonstrate an understanding of simple algebraic expressions.</b>		
<b>5.01 Simplify algebraic expressions and verify the results using the basic properties of rational numbers.</b>		
a) Identity.	*91 Inverse: 6, 16, 26, 31, 38, 62, 114, 132 Zero identity: 38	
b) Commutative.	37, 59, 91, 108, 112, 155	
c) Associative.	37	
d) Distributive.	37	
e) Order of operations.	3, 37, 38, 40, 91, 112, 155	73, 74, 132
5.02 Use and evaluate algebraic expressions.	3, 5, 8, 13, 18, 31, 37, 40, 48, 61, 69, 114	5, 8, 22, 27, 44, 46, 47, 48, 49, 50, 54, 60, 62, 65, 66, 67, 69, 70, 73, 74, 75, 77, 78, 80, 81, 82, 83, 85, 86, 87, 91, 93, 96, 98, 101, 102, 113, 115, 117, 124, 126, 128, 130, 132, 133, 142, 154, 155 Activity 14



North Carolina State Math Objectives /Excel Math Correlation  
Grade 6

<b>NORTH CAROLINA MATH OBJECTIVES</b>	<b>Excel Math Lesson Numbers</b>	<b>Excel Math Stretch # Activity Number</b>
5.03 Solve simple (one- and two-step) equations or inequalities.	3, 4, 5, 6, 18, 31, 37, 40, 43, 48, 61, 69, 91, 94, 114	5, 8, 22, 44, 46, 47, 48, 49, 50, 54, 60, 62, 64, 67, 69, 70, 73, 74, 75, 77, 78, 80, 81, 82, 83, 85, 86, 87, 91, 93, 96, 98, 101, 102, 110, 113, 115, 117, 124, 126, 128, 130, 132, 133, 142, 154, 155 Activity 14
5.04 Use graphs, tables, and symbols to model and solve problems involving rates of change and ratios.	*2, 8, 29, 40, *65, 66, 94, 97, 115, 151	33, 43, 44, 48, *50, *52, *69, 109, 119, 131 Average: 49, 138 Activity 2, 4, 6, 9, 10, 11, 14

\* Gives opportunity to teach specific standard.