

Standards / Objectives	Excel Math Lesson Numbers	Stretch Lesson Activity Numbers
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Number and Operations (N)

3.N.1 Compare and represent whole numbers up to 100,000 with an emphasis on place value and equality

3.N.1.1 Read, write, discuss, and represent whole numbers up to 100,000. Representations may include numerals, expressions with operations, words, pictures, number lines, and manipulatives.	1, 2, 3, 4, 6, 7, 9, 12, 13, 14, 17, 19, 21, 23, 24, 27, 34, 37, 38, 43, 47, 49, 52, 61, 64, 67, 79, 90, 95, 100, 101, 102, 103, 104, 132, 133, 150, 153, 154	1, 2, 6, 9, 13, 16, 19, 21, 28, 36, 85
3.N.1.2 Use place value to describe whole numbers between 1,000 and 100,000 in terms of ten thousands, thousands, hundreds, tens and ones, including expanded form.	1, 2, 4, 6, 7, 9, 12, 13, 14, 19, 23, 24, 27, 34, 38, 43, 47, 49, 52, 61, 64, 67, 79, 90, 95, 100, 101, 102, 103, 104, 132, 133, 150, 153, 154	13
3.N.1.3 Find 10,000 more or 10,000 less than a given five-digit number. Find 1,000 more or 1,000 less than a given four- or five-digit number. Find 100 more or 100 less than a given four- or five-digit number.	4, 27, *47, 64	30
3.N.1.4 Use place value to compare and order whole numbers up to 100,000, using comparative language, numbers, and symbols.	2, 3, 4, 6, 13, 21, 38, 53, 57, 98, 99, 104, 122, 132, 133	102, 117, 128 Order Events: 14, 32

3.N.2 Add and subtract multi-digit whole numbers; multiply with factors up to 10; represent multiplication and division in various ways; Solve real-world and mathematical problems through the representation of related operations.

3.N.2.1 Represent multiplication facts by using a variety of approaches, such as repeated addition, equal-sized groups, arrays, area models, equal jumps on a number line and skip counting.	39, 46, 47, 48, 49, 51, 52, 53, 56, 57, 58, 59, 64, 67, 68, 69, 71, 73, 74, 76, 79, 81, 82, 83, 84, 86, 92, 95, 96, 97, 99, 107, 111, 113, 114, 117, 119, 124, 126, 127, 131, 136, 142, 143, 144, 151	95, 114, 119, 124, 129, 154 Activity 4
3.N.2.2 Demonstrate fluency of multiplication facts with factors up to 10.	39, 46, 47, 48, 49, 52, 53, 56, 57, 58, 59, 64, 67, 68, 69, 71, 73, 74, 76, 79, 81, 82, 83, 84, 86, 92, 96, 97, 99, 107, 111, 113, 114, 117, 119, 124, 126, 127, 131, 136, 142, 143, 144, 151	95, 114, 119, 124, 129, 154 Activity 4
3.N.2.3 Use strategies and algorithms based on knowledge of place value and equality to fluently add and subtract multi-digit numbers.	1, 2, 3, 6, 7, 8, 9, 12, 14, 16, 17, 19, 22, 23, 24, 26, 27, 28, 29, 32, 33, 34, 38, 39, 41, 42, 43, 44, 45, 47, 51, 52, 53, 57, 58, 61, 64, 67, 73, 74, 79, 81, 84, 92, 95, 96, 98, 100, 131, 136, 146, 155	1, 2, 6, 9, 12, 13, 16, 21, 22, 28, 36, 38, 40, 48, 54, 65, 68, 85, 144 Activity 3
3.N.2.4 Recognize when to round numbers and apply understanding to round numbers to the nearest ten thousand, thousand, hundred, and ten and use compatible numbers to estimate sums and differences.	60, 75, 85, 90, 95, 115, 134	

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Oklahoma 3rd Grade Standards / *Excel* Math Correlation

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3.N.2.5 Use addition and subtraction to solve real-world and mathematical problems involving whole numbers. Use various strategies, including the relationship between addition and subtraction, the use of technology, and the context of the problem to assess the reasonableness of results.	9, 11, *15, 16, 20, 22, 26, 32, 40, 75, 83, 84, 85, 96, 105, 110, 112, 114, 115, 121, 123, 137, 152	7, 8, 9, 10, 12, 13, 18, 22, 23, 25, 26, 29, 35, 37, 38, 43, 45, 48, 52, 54, 55, 57, 62, 65, 69, 79, 81, 91, 92, 96, 97, 103, 105, 112, 117, 122, 123, 128, 130, 137, 138, 139, 140, 143, 144, 145, 146, 152 Activity 5, 7, 8
3.N.2.6 Represent division facts by using a variety of approaches, such as repeated subtraction, equal sharing and forming equal groups.	31, 58, 59, 71, 72, 73, 74, 79, 81, 83, 84, 87, 88, 89, 92, 93, 94, 96, 97, 98, 99, 101, 102, 103, 104, 107, 108, 113, 114, 117, 119, 126, 127, 131, 132, 133, 136, 142, 143, 146, 148, 151, 152, 153, 154	75, 149 Activity 7
3.N.2.7 Recognize the relationship between multiplication and division to represent and solve real-world problems.	31, 71, 83, 85, 87, 88, 96, 103, 105, 109, 111, 114, 117, 118, 121, 126, 127, 132, 142, 151, 153, 154	55, 62, 71, 96, 100, 105, 106, 122, 130, 135, 139 Activity 5, 7
3.N.2.8 Use strategies and algorithms based on knowledge of place value, equality and properties of addition and multiplication to multiply a two-digit number by a one-digit number.	39, 46, 53, 57, 61, 68, 75, 91, 95, 97, 114, 117, 121, 131	89, 152 Activity 7, 8
3.N.3 Understand meanings and uses of fractions in real-world and mathematical situations.		
3.N.3.1 Read and write fractions with words and symbols	31, 54, 58, 59, 66, *82, 109, 137, 140, 147, 148, 149	Activity 6, 9, 15
3.N.3.2 Construct fractions using length, set, and area models.	54, 66, *82, 109, 140, 148	Activity 6, 9, 15
3.N.3.3 Recognize unit fractions and use them to compose and decompose fractions related to the same whole. Use the numerator to describe the number of parts and the denominator to describe the number of partitions.	31, 54, 58, 59, 66, *82, 109, 137, 140, 147, 148	Activity 6, 9, 15
3.N.3.4 Use models and number lines to order and compare fractions that are related to the same whole.	147, 148, 149	Activity 6, 9
3.N.4 Determine the value of a set of coins or bills.		
3.N.4.1 Use addition to determine the value of a collection of coins up to one dollar using the cent symbol and a collection of bills up to twenty dollars.	16, 22, *33, 44, 51, *82, 114, 146	92
3.N.4.2 Select the fewest number of coins for a given amount of money up to one dollar.	*33, 44, 51, *82, *114, 146	*92 Activity *8

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Algebraic Reasoning & Algebra (A)

3.A.1 Describe and create representations of numerical and geometric patterns.

3.A.1.1 Create, describe, and extend patterns involving addition, subtraction, or multiplication to solve problems in a variety of contexts.	2, 4, 6, 7, 13, 14, 23, 26, 31, 34, 37, 45, 46, 48, 49, 63, 80, 97, 113, 155	1, 2, 6, 9, 19, 21, 28, 36, 45, 57, 82, 93, 116, 123, 138, 146
3.A.1.2 Describe the rule (single operation) for a pattern from an input/output table or function machine involving addition, subtraction, or multiplication.	2, 4, 6, 7, 14, 16, 23, 26, 31, 34, 37, 46, 48, 49, 63, 80, 97, 113, 155	2, 6, 9, 36, 45, 57, 82, 93, 116, 123, 138, 146
3.A.1.3 Explore and develop visual representations of growing geometric patterns and construct the next steps.	7, 14, 23, 31, 34, 77, 130	1, 77, 78

3.A.2 Use number sentences involving multiplication and unknowns to represent and solve real-world and mathematical problems.

3.A.2.1 Find unknowns represented by symbols in arithmetic problems by solving one-step open sentences (equations) and other problems involving addition, subtraction, and multiplication. Generate real-world situations to represent number sentences.	28, 36, 76, 81, 107, 122	1, 7, 8, 11, 12, 19, 22, 24, 31, 33, 39, 40, 44, 49, 56, 63, 68, 70, 73, 75, 77, 83, 85, 89, 94, 95, 101, 107, 110, 114, 119, 124, 125, 129, 134, 141, 149, 154
3.A.2.2 Recognize, represent and apply the number properties (commutative, identity, and associative properties of addition and multiplication) using models and manipulatives to solve problems.	24, 28, 36, 76, 81, 92, 107, 122	11, 12, 19, 22, 24, 31, 33, 39, 40, 44, 49, 56, 63, 68, 70, 73, 75, 77, 83, 85, 89, 94, 95, 101, 107, 110, 114, 119, 124, 125, 129, 134, 141, 149, 154

Geometry & Measurement (GM)

3.GM.1 Use geometric attributes to describe and create shapes in various contexts.

3.GM.1.1 Sort three-dimensional shapes based on attributes	69, 141	150
3.GM.1.2 Build a three-dimensional figure using unit cubes when picture/shape is shown.	135, 145	90, 132, 145
3.GM.1.3 Classify angles as acute, right, obtuse, and straight.	41, *139	

3.GM.2 Understand measurable attributes of real-world and mathematical objects using various tools.

3.GM.2.1 Find perimeter of polygon, given whole number lengths of the sides, in real-world and mathematical situations.	86, *106, 116, 135, 145	150 Activity 2
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3.GM.2.2 Develop and use formulas to determine the area of rectangles. Justify why length and width are multiplied to find the area of a rectangle by breaking the rectangle into one unit by one unit squares and viewing these as grouped into rows and columns.	72, *106, 124, 135, 145	Activity 2, 12
3.GM.2.3 Choose an appropriate measurement instrument and measure the length of objects to the nearest whole centimeter or meter.	10, 32, 50, 56, 62, *74, 108, 129	Activity 10, 13
3.GM.2.4 Choose an appropriate measurement instrument and measure the length of objects to the nearest whole yard, whole foot, or half inch.	10, 32, 50, 56, 62, *74, 108, 129	Activity 10, 13
3.GM.2.5 Using common benchmarks, estimate the lengths (customary and metric) of a variety of objects.	10, 32, 50, 62, *74, 108, 125, 129 Volume 63	Volume: Activity 1
3.GM.2.6 Use an analog thermometer to determine temperature to the nearest degree in Fahrenheit and Celsius.	32	
3.GM.2.7 Count cubes systematically to identify number of cubes needed to pack the whole or half of a three-dimensional structure.	135, 145	90, 132, 145 Activity 2
3.GM.2.8 Find the area of two-dimensional figures by counting total number of same size unit squares that fill the shape without gaps or overlaps.	72, 124	*4, *17 Activity 2
3.GM.3 Solve problems by telling time to the nearest 5 minutes.		
3.GM.3.1 Read and write time to the nearest 5-minute (analog and digital).	18, 65, 78, 89	
3.GM.3.2 Determine the solutions to problems involving addition and subtraction of time in intervals of 5 minutes, up to one hour, using pictorial models, number line diagrams, or other tools.	18, 65, 83, 89, 112, 152	3, 64 Activity 11

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Data & Probability (D)

3.D.1 Summarize, construct, and analyze data.		
3.D.1.1 Summarize and construct a data set with multiple categories using a frequency table, line plot, pictograph, and/or bar graph with scaled intervals.	5, 20, 35, 126	23, 143 Activity 14
3.D.1.2 Solve one- and two-step problems using categorical data represented with a frequency table, pictograph, or bar graph with scaled intervals.	5, 20, 35, 126	23, 143 Activity 14

Critical Gaps
Critical Gaps must be taught in 2016-2017 to ensure students do not skip these concepts. They are built into the Excel Math Grade 3 lessons.

Number & Operations		
2.N.1.1 Read, write, discuss and represent whole numbers up to 1000. Representations may include numerals, words, pictures, tally marks, number lines, and manipulatives.	1, 2, 3, 4, 6, 7, 9, 12, 13, 13, 17, 19, 23, 24, 27, 31, 34, 37, 38, 43, 47, 48, 59, 60, 64, 67, 102, 103, 132, 133, 153, 154, 155	
2.N.1.6 Use place value to compare and order whole numbers up to 1,000 using comparative language, numbers, and symbols.	1, 4, 7, 9, 12, 21, 38, 43, 48, 53, 113	
Geometry & Reasoning		
2.GM.1.2 Describe, compare, and classify two-dimensional figures according to their geometric attributes.	8, 41, 106, 119, 120, 139	41, 46, 50, 58, 60, 72, 76, 86, 87, 104, 111, 115, 126, 136, 147, 152
2.GM.1.4 Recognize right angles and classify angles as smaller or larger than a right angle	41, 138	
2.GM.1.1 Recognize trapezoids and hexagons	106	
Data & Probability		
2.D.1.3 Write and solve one-step word problems involving addition or subtraction using data represented within pictographs and bar graphs with intervals of one.	11, 15, 16, 20, 22, 25, 32, 35, 40, 65, 70, 83, 85, 89, 105, 110, 114, 152	7, 10, 12, 18, 22, 23, 26, 37, 38, 43, 52, 54, 69, 81, 97,

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Standards / Objectives

Excel Math
Lesson Numbers

Stretch Lesson
Activity Numbers

These are advanced concepts in *Excel* Math lessons not required by Oklahoma Standards for Grade 3, designed to introduce students to concepts they will encounter in future years:

Maps	10	
Deductive Reasoning	15, 70, 110	18, 20, 25, 27, 29, 32, 37, 42, 47, 51, 53, 59, 61, 66, 67, 74, 80, 84, 88, 98, 99, 108, 109, 113, 118, 120, 121, 131, 133, 140, 148, 153
Combinations	30	
Prime	144	
Line of Symmetry	55	
Perpendicular lines/Diagonal lines/line segments	128, 129, 138	
Volume	63	Activity 1