Excel Math

Oklahoma Standards /*Excel* Math Correlation
5th Grade

OKLAHOMA MATH STANDARDS	*Excel* Math Lesson Numbers	Stretch Lesson Numbers Activity Numbers
Standard 1: Patterns and Algebraic Reasoning - The student will use algebraic methods to describe patterns and solve problems in a variety of contexts.		
1. Describe rules that produce patterns found in tables, graphs, and models, and use variables (e.g., boxes, letters, pawns, number cubes, or other symbols) to solve problems or to describe general rules in algebraic expression or equation form.	6, 13, 42, 55, 80, 86, 87, 104, 108, 111, 120, 124, 138, 139, 141, 143	1, 3, 4, 7, 9, 12, 13, 18, 32, 36, 41, 44, 45, 47, 59, 66, 69, 81, 84, 87, 92, 96, 103, 105, 109, 113, 116, 117, 118, 126, 128, 131, 134, 135, 141, 142, 149, 150 Activity 1, 2, 3, 4
2. Use algebraic problem-solving techniques (e.g., use a balance to model an equation and show how subtracting a number from one side requires subtracting the same amount from the other side) to solve problems.	1, 2, 14, 18, 19, 37, 55, 58, 77, 82, 124, 127, 140, 143, 146 Coordinate points 52, 64, 90, 95, 123, 140	1, 2, 3, 4, 5, 8, 12, 21, 31, 32, 36, 41, 44, 47, 52, 58, 67, 69, 72, 81, 87, 92, 105, 107, 109, 110, 113, 116, 120, 127, 129, 141, 146, 147, 155
Standard 2: Number Sense - The student will demonstrate an understanding of the basic concepts and properties of real numbers.		
1. Fractions, Decimals and Percents		
a. Solve problems using decimal numbers to the 1000ths place.	3, 4, 41, 66, 79, 81, 92, 94, 100, 107, 112, 113, 120, 121, 131, 132, 136, 145, 149	*13, *18, 20, 64, 79, 80, 89, 119, 121, 127, 129, 144 Activity 8
b. Compare, convert, and order common fractions and decimals to the 100ths place to solve problems.	31, 39, 43, 65, 68, 76, 77, 78, 83, 85, 98, 99, 105, 106, 112, 113, 116, 117, 118, 121, 126, 127, 136, 142, 146, 148	*144
c. Represent with models the connection between fractions, decimals, and percents and be able to convert from one representation to another (e.g., use 10 x 10 grids, base-10 blocks; limit fractions to halves, fourths, fifths, and tenths).	15, 31, 65, *66, *68, 83, 109, 112, *113, 116, 117, 125, 130, 142, 149	*144, *148 Activity 14
d. Explain verbally with manipulatives and diagrams 25%, 50%, 75%; use these percents to solve problems and relate them to their corresponding fractions and decimals.	83, 109, 112, 116, 130, 142, 149	*144, *148 Activity 14
2. Basic Number Theory Concepts		
a. Apply the basic properties of arithmetic: commutative, associative, distributive, and identity (e.g., show 2 (5 +1) = (2 · 5) + (2 · 1), given (5 + 1) + (5 + 1) regroup to show this equals (5 + 5) + (1 + 1) concluding with (2 · 5) + (2 · 1)) to solve problems.	11, 16, 28, 32, 96 Inverse operations: 21, 27, 33, 34, 41, 46, 47, 49, 73, 79, 94, 124, 128, 141, 147	

OKLAHOMA MATH STANDARDS	*Excel* Math Lesson Numbers	Stretch Lesson Numbers Activity Numbers
b. Identify and apply factors, multiples, prime, and composite numbers in a variety of problem-solving situations (e.g., build rectangular arrays for numbers 1-100 and classify as prime or composite).	1, 11, 16, 28, 29, 38, 49, 61, 62, 88, 91, 93, 119, 138, 141 Positive / negatives numbers: 89, 123, 150, 151, 154, 155 Ordinals: 13 Place value: 1, 65, 80	84, 95, 149

Standard 3: Number Operations and Computation - The student will estimate and compute with whole numbers, decimals and fractions.

1. Estimation

a. Use estimation skills to determine solutions to problems involving decimals.	Whole numbers: 25, 82 4, 41, 92, 121	20, 79, 80, 119, 121, 127, 129 Large whole numbers: 70 Activity 7
b. Apply estimation skills to solve problems involving common percents and equivalent fractions.	39, 44, 59, 99, *113, *130, *142	*148 Activity 14

2. Whole Numbers, Decimals, and Fractions

a. Add and subtract decimal numbers with the same and different place values (e.g., 3.72 + 1.4) to solve problems.	Whole numbers: 1, 82, 150, 151, 154, 155 Decimals: 3, 4, 66, 92	Whole: 1, 2, 3, 12, 17, 33, 61, 66, 69, 84, 92, 103, 107, 111, 116, 145, 150 Decimals: 13, 20, 64, 79, 80, 89, 119, 129
b. Multiply and divide whole numbers and decimal numbers with 1- or 2-digit multipliers or divisors to solve problems.	Whole: 2, 9, 11, 21, 22, 24, 26, 27, 28, 29, 33, 34, 36, 38, 44, 46, 47, 48, 49, 51, 55, 63, 70, 71, 73, 74, 86, 97, 101, 103, 106, 111, 119, 121, 128, 131, 135, 139, 141, 146 Decimals: 41, 79, 81, 94, 100, 107, 112, 116, 120, 131, 132, 135, 136, 145, 147, 149	10, 17, 19, 29, 41, 52, 55, 61, 70, 80, 89, 98, 106, 113, 127, 129, 146, 147, 155
c. Add and subtract fractions and mixed numbers to solve problems using a variety of methods (e.g., use fraction strips, find the least common denominator [LCD]).	15, 23, 50, 69, 99, 122 Multiply/divide: 59, 76, 110, 113, 118, 126, 127, 129, 133, 135, 136, 142, 144, 146, 153	132, 133

Standard 4: Geometry and Measurement - The student will apply geometric properties and relationships and use measurements within the metric and customary systems to solve problems in a variety of contexts.

1. Identify and describe the basic properties of figures (e.g., two or three-dimensionality, symmetry, number of faces, types of angles).	20, 30, 35, 42, 45, 53, 54, 63, 71, 75, 86, 134, 137, 144	15, 22, 25, 34, 40, 43, 45, 49, 50, 56, 59, 63, 71, 73, 76, 78, 85, 88, 93, 94, 100, 104, 112, 122, 128, 134, 136, 138, 142 Activity 10, 11, 12

Excel Math

Oklahoma Standards /*Excel* Math Correlation
5th Grade

OKLAHOMA MATH STANDARDS	*Excel* Math Lesson Numbers	Stretch Lesson Numbers Activity Numbers
2. Find the perimeter of simple polygons and area of a rectangle (e.g., use 1-inch tiles to build rectangles of different perimeters and areas).	54, 56, 63, 95, 134, 137, 152 Triangle: 144 Circumference: 145	99, 106, 122, 138, 139, 140, 147 Activity 9
3. Use nonstandard units (beans, rice, candies) and standard units (centimeter cubes, 1-inch cubes) to find the volume of rectangular solids and estimate the volume of other solids.	12, 72, 84, 137, 144	14, 143 Activity 9, 13
4. Use the appropriate units and tools to estimate and measure temperature, distance, length, weight, and angles.	12, 17, 30, 74, 114, 144 Time / Dates: 7, 8, 51, 57, 73	14, 24, 58, 67, 72, 74, 99, 111, 114, 115, 124, 127, 137, 138, 148, 152 Time / Dates: 5, 6, 31, 39, 125, 151, 154
5. Convert basic measurements of volume, weight and distance within the same system for metric and customary units (e.g., inches to feet, hours to minutes, centimeters to meters).	12, 17, 48, *54, 58, 67, *74, *114	124, *143, *148, *152 Activity *9, *13
Standard 5: Data Analysis and Probability - The student will use data analysis, statistics and probability to interpret data in a variety of contexts.		
1. Data Analysis		
a. Analyze data to create and interpret tables and graphs.	5, 20, 35, *40, *53, 115	11, 117, 118, 126, 135 Activity 1, 2, 3, 4
b. Justify the selection of the type of table or graph (e.g., a line graph may be more appropriate than a bar graph when displaying the height of a person over time).	5, 20, 35, *40, 115	11, 117, 118, 126, 135 Activity 1, 2, 3, 4
c. Compare and translate between displays of data (e.g., multiple sets of data on the same graph, Venn diagrams, a combination of diagrams, charts, tables, graphs).	5, 40, 53, 115	117, 126, 135 Activity 1, 2, 3, 4
d. Formulate questions, design investigations, consider samples, and collect, organize, and analyze data using observation, measurement, surveys, or experiments (e.g., how far can 5th graders throw a softball based on where it first hits the ground?).	5, 40, 53, 115	117, 126, 135 Activity 1, 2, 3, 4
e. Determine the range (spread) and the mean (average) of a set of data.	40, 102, 103, 115, 135	130 Ratios: 137

Excel Math

Oklahoma Standards /*Excel* Math Correlation
5th Grade

OKLAHOMA MATH STANDARDS	*Excel* Math Lesson Numbers	Stretch Lesson Numbers Activity Numbers
2. Probability		
a. Determine the probability of events occurring in familiar contexts or experiments and express probabilities as fractions (e.g., find the fractional probability of an event given a biased spinner).	60, 117, 142	*123, *133 Activity 6
b. List permutations and combinations of up to five items.	4, 58	2, 15, 55, 61, 65, 84, 102, 118, 123, 124, 132, 145 Activity 5, 6
	Story Problems: 2, 4, 10, 13, 15, 16, 29, 32, 44, 55, 57, 58, 69, 70, 73, 79, 82, 92, 97, 103, 109, 116, 117, 130, 133, 142, 149 Order / compare: 6, 9	Story Problems: 6, 10, 11, 17, 19, 23, 24,27, 28, 29, 33, 35, 48, 54, 55, 57, 61, 70, 74, 77, 86, 89, 93, 96, 98, 99, 101, 102, 108, 111, 114, 115, 117, 120, 121, 125, 126, 127, 130, 133, 135, 137, 148, 149, 150, 151, 154 Order: 6, 16, 26, 30, 37, 38, 39, 42, 46, 51, 53, 62, 68, 75, 83 90, 153

*Gives Opportunity