



Louisiana 6th Grade Standards / Excel Math Correlation

| Unit # | Standards / Objectives | Excel Math Lesson Numbers | Activity Numbers Stretch Numbers |
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| NUMBER AND NUMBER RELATIONS | | | |
|-----------------------------|--|--|--|
| 1 | 1. Factor whole numbers into primes (N-1-M) | 50 | 72, 88 |
| 1 | 2. Determine common factors and common multiples for pairs of whole numbers (N-1-M) | 1, 9, 17, 26, 50, 64, 103, 132 Factorials: 150 | 67 Activity 11, 12 |
| 1,5 | 3. Find the greatest common factor (GCF) and least common multiple (LCM) for whole numbers in the context of problem-solving (N-1-M) | *1, 17, 56, *64 | 90, 92, 99, 139 |
| 3 | 4. Recognize and compute equivalent representations of fractions and decimals (i.e., halves, thirds, fourths, fifths, eighths, tenths, hundredths) (N-1-M) (N-3-M) | 5, 18, 35, 44, 46, 47, 48, 57, 62, 71, 78, 83, 87, 90, 94, 97, 99, 110, 111, 129, 133, 135, 148 Reciprocals: 101 | Activity 12 |
| 3,5 | 5. Decide which representation (i.e., fraction or decimal) of a positive number is appropriate in a real-life situation (N-1-M) (N-5-M) | 1, *5, 9, *18, 19, 31, 42, 43, 67, 69, 72, 79, 86, 87, 92, 94, 96, 99, 117, 126, 133, 141, 152, 153 | 2, 6, 7, 9, 10, 12, 18, 25, 35, 38, 42, 43, 46, 84, 85, 93 |
| 3,8 | 6. Compare positive fractions, decimals, and positive and negative integers using symbols (i.e., <, =, >) and number lines (N-2-M) | 2, 18, 22, 27, 35, 44, 46, 47, 49, 52, 53, 57, 66, 70, 74, 83, 87, 94, 97, 99, 110, 111, 113, 127, 130, 131, 135 Distributive, Associative, Commutative: 37 | 3, 23, *29, 41 |
| 3 | 7. Read and write numerals and words for decimals through ten-thousandths (N-3-M) | *1, 35, *44, *46, *49, 61, 95, 108 Whole Numbers: 24, 58 Fractions: 5 | 144 Activity 12 |
| 8 | 8. Demonstrate the meaning of positive and negative numbers and their opposites in real-life situations (N-3-M) (N-5-M) | 58, *63, 109, *130, *131, *143, *144, *155 Odd / Even: 19, 75 | |
| 5 | 9. Add and subtract fractions and decimals in real-life situations (N-5-M) | 1, 5, *28, 31, 39, 48, *61, *62, *78, 79, 86, 93, 110, 146 Multiply: 51, 85, 94, 104, 106, 110, 112, 117, 120 Divide: 118, 126, 128, *138, 142, 153 | 18, 35, 38, 49, 85, 93, 96, 110, 150 |



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| 3 | 10. Use and explain estimation strategies to predict computational results with positive fractions and decimals (N-6-M) | *19, *31, *44, 49, *61, *79, 81, 86, 123 Whole Numbers: 20, 134 | *12, 35, 85 Whole Numbers: 20, 31, 32 |
| 1 | 11. Mentally multiply and divide by powers of 10 (e.g., $25/10 = 2.5$; $12.56 \times 100 = 1,256$) (N-6-M) | 12, *20, 24, 31, *37, 42, *43, *44, 58, 81, 94, 102, 107 | Activity 12 |
| 7 | 12. Divide 4-digit numbers by 2-digit numbers with the quotient written as a mixed number or a decimal (N-7-M) | 6, *9, 16, *26, 38, 41, 52, 62, 81, 82, 102, 103, 107, 128, 132, 134, 136, 140, 147 Multiply: 122 | 42, 76, 78, 87, 102, 111, 115, 130, 155 |
| 3 | 13. Use models and pictures to explain concepts or solve problems involving ratio, proportion, and percent with whole numbers (N-8-M) | 40, 44, 48, 52, 66, 67, 71, 90, 94, 97, 98, 99, 105, 110, 111, 116, 127, 129, 133, 135 | 48, *50, 54, 109, 143, 147, 152 Activity 4, 6, 12 |
| ALGEBRA | | | |
| 1,4,8 | 14. Model and identify perfect squares up to 144 (A-1-M) | 77 | |
| 4,8 | 15. Match algebraic equations and expressions with verbal statements and vice versa (A-1-M) (A-3-M) (A-5-M) (P-2-M) | 3, 4, 6, 18, 31, 42, 43, 48, 54, 59, 67, 69, 72, 76, 96, 100, 114, 115, 116, 148 | 1, 2, 5, 6, 7, 9, 10, 12, 16, 17, 20, 21, 22, 24, 26, 27, 28, 30, 31, 32, 37, 39, 40, 41, 42, 44, 46, 47, 50, 54, 59, 60, 63, 65, 68, 69, 75, 76, 81, 82, 86, 89, 91, 93, 101, 111, 123, 124, 154 |
| 4,8 | 16. Evaluate simple algebraic expressions using substitution (A-2-M) | 3, 4, *18, 48, 61, 83, 100, 114, 115, 148 | 1, 5, 6, 8, 16, 20, 21, 31, 32, 39, 40, 41, 68, 69, 73, 78, 81, 82, 83, 86, 87, 96, 98, 102, 110, 113, 115, 117, 124, 126, 130, 133, 142, 155 |
| 4,8 | 17. Find solutions to 2-step equations with positive integer solutions (e.g., $3x - 5 = 13$, $2x + 3x = 20$) (A-2-M) | 3, 6, 18, 37, 43, 48, 54, 57, 59, 61, 67, 69, 72, 91, 92, 96, 114, 115, 148 | 2, 5, 6, 7, 10, 12, *17, 21, 22, 24, 27, 28, 30, 31, 32, 37, 39, 40, 41, 42, 44, 46, 47, 50, 54, 59, 60, 62, 63, 65, 67, 68, 69, 70, 75, 76, 77, 81, 82, 86, 89, 91, 93, 101, 111, 124, 126, 132, 133, 138, 154 |

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| MEASUREMENT | | | |
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| 3,4,5 | 18. Measure length and read linear measurements to the nearest sixteenth-inch and mm (M-1-M) | 10, 11 | 39, 54 |
| 4 | 19. Calculate perimeter and area of triangles, parallelograms, and trapezoids (M-1-M) | 30, 75, 121, 139 Surface Area: 100 Volume: 59, 108, 139 | 28, 39, 55, 56, 63, 77, *84 Volume: 59 Activity 3, 4 |
| 3 | 20. Calculate, interpret, and compare rates such as \$/lb., mpg, and mph (M-1-M) (A-5-M) | 10, 11, *40, 89, 151 Time: 13, 43 Scale Map: 29 | 39, 48, 74, 111 |
| 4 | 21. Demonstrate an intuitive sense of relative sizes of common units for length and area of familiar objects in real-life problems (e.g., estimate the area of a desktop in square feet, the average adult is between 1.5 and 2 meters tall) (M-2-M) (G-1-M) | 11, *30 Convert measurements: 137, 141 Scale Map: 29 | 28, 39, 55, 84 Time: 137 Weight: 136 Activity 1, 3, 4, 7 Density: Activity 13 Range / Velocity: Activity 14 |
| 4 | 22. Estimate perimeter and area of any 2-dimensional figure (regular and irregular) using standard units (M-2-M) | 10, 75 Circle: 125 | 28, 39, 55, 56, *63 Weight: 136 Activity 2, 3, 4 |
| 4 | 23. Identify and select appropriate units to measure area (M-3-M) | 75 | 28, 39, 55, 56 Activity 2, 3, 4 |

*Gives opportunity to teach specific State Standard

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GEOMETRY

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| 4 | 24. Use mathematical terms to describe the basic properties of 3-dimensional objects (edges, vertices, faces, base, etc.) (G-2-M) | 15, 59, 100, 139 Two-dimension: 14, 21 | 51, 57, *58, 64, 118 Two-dimension: 45, 53 Activity 2, 5, 7 |
| 4 | 25. Relate polyhedra to their 2-dimensional shapes by drawing or sketching their faces (G-2-M) (G-4-M) | *15, 100, 139 | 51, 57, 64, 118, *148 Activity 1, 2, 5 |
| 4 | 26. Apply concepts, properties, and relationships of points, lines, line segments, rays, diagonals, circles, and right, acute, and obtuse angles and triangles in real-life situations, including estimating sizes of angles (G-2-M) (G-5-M) (G-1-M) | 11, 14, 25, 33, 60, 80, 88, 125 Symmetry / Congruent: 23 | 23, 29, 36, 71 Activity 1, 2 |
| 4 | 27. Make and test predictions regarding tessellations with geometric shapes (G-3-M) | | *14, *53, *108, *116, *129 Activity 8 |
| 4 | 28. Use a rectangular grid and ordered pairs to plot simple shapes and find horizontal and vertical lengths and area (G-6-M) | *32, 36, 68, 76, *109, 145 Slope / intercept: 115 | Activity 3 |

ANALYSIS, PROBABILITY, and DISCRETE MATH

| | | | |
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| 2 | 29. Collect, organize, label, display, and interpret data in frequency tables, stem-and-leaf plots, and scatter plots and discuss patterns in the data verbally and in writing (D-1-M) (D-2-M) (A-3-M) | 2, 8, 15, 34, 40, 69, 70, 100, 150 Deductive reasoning: 7 | *1, 4, *6, 9, 11, 19, 60, 65, 67, 75, 81, 91, 95, 106 Deductive reasoning: 120, 145 Activity 9, 11 |
| 2 | 30. Describe and analyze trends and patterns observed in graphic displays (D-2-M) | 2, 4, 8, 34, 40, 69, 70, 100, 150 | *1, 9, 11, 19, 60, 65, 67, 75, 81, 91, 154 Activity 9, 11 |
| 3,5 | 31. Demonstrate an understanding of precision, accuracy, and error in measurement (D-2-M) (M-2-M) | 2, *13, *34, *40, 75 | *54 Activity 9 |

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| 2 | 32. Calculate and discuss mean, median, mode, and range of a set of discrete data to solve real-life problems (D-2-M) | 20, 65 Average: 55, 120 | Average: 47, 138 Activity *9, 10 |
| 2 | 33. Create and use Venn diagrams with two overlapping categories to solve counting logic problems (D-3-M) | 45, 56 | 33, 43, 52 |
| 6 | 34. Use lists, tree diagrams, and tables to determine the possible combinations from two disjoint sets when choosing one item from each set (D-4-M) | 8, 69, 150 | *1, 11, 19, 40, 81, 97, 146, 149 |
| 6 | 35. Illustrate and apply the concept of complementary events (D-5-M) | 8, 34, 69, 150 | Activity 9, 11 |
| 6 | 36. Apply the meaning of <i>equally likely</i> and <i>equally probable</i> to real-life situations (D-5-M) (D-6-M) | 34, 99 | 19, 138 |
| PATTERNS, RELATIONS, and FUNCTIONS | | | |
| 2,8 | 37. Describe, complete, and apply a pattern of differences found in an input-output table (P-1-M) (P-2-M) (P-3-M) | 8, 40, 54, 69, 72, 84, 149 | *6, 34, 66, 80, 93, 94, *100, 103, 112, 114, 123, 125, 127, 128, 135, 146, 153 |
| 1,8 | 38. Describe patterns in sequences of arithmetic and geometric growth and now-next relationships (i.e., growth patterns where the next term is dependent on the present term) with numbers and figures (P-3-M) (A-4-M) | *2, 4, 8, 21, 33, 40, 54, 69, 73, 74, 84, 149 | 6, 13, 15, 24, 26, 30, 32, 34, 58, 61, 62, 64, 66, 70, 75, 80, 81, 93, 94, 104, 107, 109, 119, 121, 122, 131, 140, 141, 151 Order: 105, 134 |