Unit	5th: Unit 9- Shape and Number Patterns Math Investigations Book: Growth Patterns Standards for Grade 5 <u>UNIT 1</u> = Place Value, Addition & Subtraction of Whole Numbers <u>UNIT 2</u> = Addition and Subtraction of Fractions <u>UNIT 3</u> = Operations with Decimals and Place Value <u>UNIT 4</u> = Volume <u>UNIT 5</u> = Multiplication and Division of Whole Numbers <u>UNIT 6</u> = Multiplication and Division of Fractions <u>UNIT 7</u> = Names and Properties of Shapes <u>UNIT 8</u> = Multiplication and Division of Greater Whole Numbers <u>UNIT 9</u> = Shape and Number Patterns
9,3,4,5	5.OA.1 Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols.
9,5,8	5.OA.2 Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them. For example, express the calculation "add 8 and 7, then multiply by 2" as 2 x (8 + 7). Recognize that 3 x (18,932 + 921) is three times as large as 18,932 + 921, without having to calculate the indicated sum or product.
9	5.OA.3 Generate two numerical patterns using two given rules. Identify apparent relationships between corresponding terms. Form ordered pairs consisting of corresponding terms from the two patterns, and graph the ordered pairs on a coordinate plane. For example, given the rule "Add 3" and the starting number 0, and given the rule "Add 6" and the starting number 0, generate terms in the resulting sequences, and observe that the terms in one sequence are twice the corresponding terms in the other sequence. Explain informally why this is so.
9,3	5.NBT.3.a Read and write decimals to thousandths using base-ten numerals, number names, and expanded form, e.g., $347.392 = 3 \times 100 + 4 \times 10 + 7 \times 1 + 3 \times (1/10) + 9 \times (1/100) + 2 \times (1/1000)$.
9,3	5.NBT.3.b Compare two decimals to thousandths based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons.
9,3	5.MD.1 Convert among different-sized standard measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m), and use these conversions in solving multi-step, real world problems.
9	5.G.1 Use a pair of perpendicular number lines, called axes, to define a coordinate system, with the intersection of the lines (the origin) arranged to coincide with the 0 on each line and a given point in the plane located by using an ordered pair of numbers, called its coordinates. Understand that the first number indicates how far to travel from the origin in the direction of one axis, and the second number indicates how far to travel in the direction of the second axis, with the convention that the names of the two axes and the coordinates correspond (e.g., <i>x</i> -axis and <i>x</i> -coordinate, <i>y</i> -axis and <i>y</i> -coordinate).
9	5.G.2 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.

2015 All Rights Reserved