Corrective Mathematics

Common Core State Standards for Grade 5	Lesson Reference
Operations and Algebraic Thinking 5.OA	
Write and interpret numerical expressions.	
5.OA.1. Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols.	**Fractions-Decimals-Percents, TPB:** (Lesson.Exercise) 1.1, 2.1, 3.1
5.OA.2. Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them. *For example, express the calcul*	

	33.3, 33.4, 34.4-6, 35.3-6, 36.3-6, 37.3-8, 38.3-5, 39.3, 39.4, 40.3, 40.4, 41.2, 41.2, 42.2, 43.2 **Fractions-Decimals-Percents, WB:** (Lesson.Exercise) 32.4, 33.3, 34.4, 34.5, 36.3, 35.4, 36.3-5, 37.3-5, 38.3, 38.4, 39.3, 39.4, 40.3, 40.4, 41.2, 41.3, 42.2, 43.3
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.	
5.NBT.4. Use place value understanding to round decimals to any place.	
Perform operations with multi-digit whole numbers and with decimals to hundredths.	
5.NBT. 5. Fluently multiply multi-digit whole numbers using the standard algorithm.	**Multiplication, TPB:** (Lesson.Exercise) 16.5, 17.6, 17.7, 18.5, 19.5, 20.6, 21.6, 22.6, 23.3, 24.6, 25.6, 26.6, 27.5, 28.7, 29.7, 30.3, 31.3, 31.4, 31.5, 31.8, 32.3, 32.4, 33.6, 34.7, 35.4, 35.6, 36.6, 37.6, 38.5, 39.6, 39.7, 40.6, 41.7, 42.3, 43.4, 44.7, 45.5, 46.6, 47.6, 48.5, 49.5, 51.6, 52.6, 53.5, 54.6, 54.7, 54.8, 55.6, 55.7, 56.6, 57.6 **Multiplication, WB:** (Lesson.Exercise) 16.4, 17.5, 17.6, 18.5, 19.5, 20.6, 21.6, 22.6, 23.3, 24.6, 25.6, 26.6, 27.5, 28.7, 29.6, 30.3, 31.3, 31.4, 31.5, 31.7, 32.3, 32.4, 33.6, 34.7, 35.4, 35.6, 36.6, 37.6, 38.5, 39.6, 39.7, 40.6, 41.7, 42.3, 43.4, 44.7, 45.5, 46.6, 47.6, 48.5, 49.5, 51.6, 52.6, 53.5, 54.6,

	54.7, 54.8, 55.6, 55.7, 56.6, 57.6, 58.4, 58.5, 59.5, 59.6, 60.5, 60.6, 61.4, 61.5, 62.4, 62.5, 63.4, 64.4, 65.3, 65.4
5.NBT.6. Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.	**Division, TPB:** (Lesson.Exercise) 6.3-6, 7.2-5, 8.2-4, 9.2-6, 10.3-6, 11.1-7, 12.1-7, 13.1-3, 14.3-5, 15.3-5, 16.3, 16.4, 17.5-7, 18.5, 19.3, 20.3, 21.5, 21.6, 22.5, 22.6, 23.4-6, 24.4-6, 25.4, 25.5, 26.4, 27.5, 28.4, 29.5, 30.6, 30.7, 31.5, 32.3, 32.4, 33.6, 34.7, 35.4, 35.5, 36.4-6, 37.6, 37.7, 38.4, 38.5, 39.3, 39.5, 39.7, 39.8, 40.6-9, 41.6-8, 42.4, 42.5, 43.4, 43.6, 44.5, 44.6, 45.6, 45.7, 46.6, 47.6, 47.7, 50.3, 50.6, 51.6, 52.4, 53.3, 54.4, 54.6, 55.6, 56.4 **Division, WB:** (Lesson.Exercise) 6.3, 6.4, 7.2, 7.3, 8.2, 9.2-4, 10.3-5, 11.1-5, 12.1-5, 13.1, 14.3, 15.3, 15.4, 16.2, 16.3, 17.4, 17.5, 18.4, 19.2, 20.2, 21.3, 22.3, 23.3-5, 24.2-4, 25.2, 5.3, 26.3, 27.4, 28.4, 29.4, 30.5, 30.6, 31.3, 32.3, 32.4, 33.5, 34.6, 35.3, 35.4, 36.3, 36.5, 37.5, 38.3, 39.2, 39.3, 39.5, 40.5-7, 41.5-7, 52.3, 42.4, 43.3, 43.5, 44.4, 44.5, 45.5, 45.6, 46.5, 47.5, 47.6, 50.2, 50.5, 51.5, 52.3, 53.3, 54.3, 54.5, 55.5, 56.3, 57.6, 58.5, 59.3, 60.3, 61.3, 62.3, 63.2, 64.3, 65.2

5.NBT.7. Add, subtract, multiply, and divide decimals to hundredths, using concrete models or

	Fractions-Decimals-Percents, WB: (Lesson.Exercise) 2.2, 6.3, 6.4, 7.3, 8.3, 8.4, 9.3, 10.3, 11.1, 11.3, 11.4, 12.1, 13.1, 14.1, 15.2, 16.2, 17.3, 18.4, 19.3, 20.3, 21.3, 22.4, 23.3, 26.3, 27.3, 28.3, 29.3, 30.3, 31.3, 33.2, 35.1, 36.1, 38.1, 40.1
5.NF.2. Solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators, e.g., by using visual fraction models or equations to represent the problem. Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers. *For example, recognize an incorrect result 2/5 + ½ = 3/7, by observing that 3/7 < ½.*	
Apply and extend previous understandings of multiplication and division to multiply and divide fractions.	
5.NF.3. Interpret a fraction as division of the numerator by the denominator (*a*/*b* = *a* ÷ *b*). Solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers, e.g., by using visual fraction models or equations to represent the problem. *For example, interpret 3/4 as the result of dividing 3 by 4, noting that 3/4 multiplied by 4 equals 3, and that when 3 wholes are shared equally among 4 people each person has a share of size 3/4. If 9 people want to share a 50-pound sack of rice equally by weight, how many pounds of rice should each person get? Between what two whole numbers does your answer lie?*	
5.NF.4. Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction.	
5.NF.4a. Interpret the product (*a*/*b*) × *q* as *a* parts of a partition of *q* into *b* equal parts; equivalently, as the result of a sequence of operations *a* × *q* ÷ *b*. For example, use a visual fraction model to show (2/3) × 4 = 8/3, and create a story context for this equation. Do the same with (2/3) × (4/5) = 8/15. (In general, (*a*/*b*) × (*c*/*d*) = *ac*/*bd*).	**Basic Fractions, TPB:** (Lesson.Exercise) 23.3, 24.3, 25.2, 26.3, 27.2, 28.3, 29.4, 30.2, 30.3, 31.1, 32.1, 33.1, 34.1, 34.3, 35.1, 35.3, 36.1, 37.2, 38.2, 39.5, 40.3, 41.3, 42.2, 43.3, 44.4, 45.5, 46.5, 47.3, 48.1, 49.4, 50.5, 51.2, 52.3, 53.2, 54.2, 55.2 **Basic Fractions, WB:** (Lesson.Exercise) 23.5, 24.3, 25.3, 26.5, 27.4, 28.3, 29.4, 30.2, 30.3,

	31.1, 32.1, 33.1, 34.1, 34.3, 35.1, 35.3, 36.1, 37.1, 38.1, 39.2, 40.1, 41.2, 42.2, 43.2, 44.3, 45.2, 46.4, 47.2, 48.1, 49.3, 50.4, 51.2, 52.3, 53.2, 54.2, 55.2 **Fractions-Decimals-Percents, TPB:** (Lesson.Exercise) 1.6, 2.4, 6.6, 8.4, 12.5, 15.4, 16.3, 17.3, 18.4, 19.3, 20.5, 21.5, 22.5, 23.4, 26.4, 30.3, 35.1, 38.1, 40.1 **Fractions-Decimals-Percents, WB:** (Lesson.Exercise) 1.3, 2.2, 6.4, 8.4, 12.4, 15.2, 16.2, 17.3, 18.4, 19.3, 20.3, 21.3, 22.4, 23.3, 26.3, 30.3, 35.1, 38.1, 40.1
5.NF.4b. Find the area of a rectangle with fractional side lengths by tiling it with unit squares of appropriate unit fraction side lengths, and show that the area is the same as would be found by multiplying the side lengths. Multiply fractional side lengths to find areas of rectangles, and represent fraction products as rectangular areas.	

	55.2 **Fractions-Decimals-Percents, TPB:** (Lesson.Exercise) 1.6, 6.6, 8.4, 12.5, 15.4, 16.3, 17.4, 18.4, 20.5, 21.5, 22.5, 23.4, 26.4, 30.3, 35.1 **Fractions-Decimals-Percents, WB:** (Lesson.Exercise) 1.3, 6.4, 8.4, 12.4, 15.2, 16.2, 17.3, 18.4, 20.3, 21.3, 22.4, 23.3, 26.3, 30.3, 35.1
5.NF.7. Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions.	
5.NF.7a. Interpret division of a unit fraction by a non-zero whole number, and compute such quotients. *For example, create a story context for (1/3) ÷ 4, and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that (1/3) ÷ 4 = 1/12 because (1/12) × 4 = 1/3.*	
5.NF.7b. Interpret division of a whole number by a unit fraction, and compute such quotients. *For example, create a story context for 4 / (1/5), and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that 4 / (1/5) = 20 because 20 x (1/5) = 4.*	
5.NF.7c. Solve real world problems involving the division of unit fractions by non-zero whole numbers and division of whole numbers by unit fractions, e.g., by using visual fraction models and equations to represent the problem. *For example, how much chocolate will each person get if 3 people share ½ lb. of chocolate equally? How many 1/3-cup servings are in 2 cups of raisins?*	

5.MD.3.