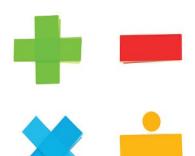
Operations 4 Algebraic Thinking

4th Grade—"I Can Do Math"
I can use the four operations (+, -, x, /) to help
me solve problems.

- 4.0A.1 \Box I can understand that multiplication equations can be seen as comparisons of groups (e.g. $24 = 4 \times 6$ can be thought of as 4 groups of 6 or 6 groups of 4).
- 4.0A.2 I can multiply or divide to solve word problems by using drawings or writing equations and solving for a missing number.
- 4.0A. 3 I can solve multi-step word problems that use whole numbers and have a remainder using the four operations.
- 4.0A. 3. a I can represent multi-step word problems using equations with a letter that represents an unknown quantity.
- 4.OA.3. b \square I can determine how reasonable my answers to word problems are by using estimation, mental math, and rounding.

I can become familiar with factors and multiples

- 4.0A.4 \square I can find all factor pairs for a whole number from I to IOO.
- 4.0A.4 I can recognize a whole number as a multiple of each of it's factors.
- 4.0A.4 I can determine whether a whole number within the range of I-100 is a multiple of a given one digit number.
- 4.0A.4 \square I can determine whether a given whole number up to 100 is a prime or composite number.



Numbers 4

Operations in Base 10

4th Grade—"I Can Do Math"

I can use place value to help me understand larger numbers.

- 4.NBT. I.□ I can recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right.
- 4.NBT.2 I can read and write larger whole numbers using numerals, words, and expanded form.
- 4.NBT.2 \square I can compare two larger numbers by using what I know about the values in each place.
- 4.NBT.2 \square I can compare two larger numbers and use the symbols >, =, and < to show the comparison.
- 4.NBT.3 □ I can round larger whole numbers to any place.

I can use what I know about place value and operations (+, -, x, /) to solve problems with larger numbers.

- 4.NBT.4 □ I can add and subtract larger numbers.
- 4.NBT.5 \square I can multiply a whole number up to four digits by a one-digit whole number.
- 4.NBT.5 □ I can multiply two, two-digit numbers.
- 4.NBT.5 □ I can illustrate and explain how to multiply larger numbers by using equations, arrays, or models.
- 4.NBT.6 I can find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors.
- 4.NBT.6 □ I can illustrate and explain how to divide larger numbers by using equations, arrays, or models.

Numbers 4

Operations (Fractions)

4th Grade—"I Can Do Math"

I can improve my understanding of fractions.

- 4.NF. I = I can explain (and show models for) why multiplying a numerator and a denominator by the same number does not change the value of a fraction.
- 4.NF. | | can recognize and generate equivalent fractions based on my knowledge of numerators and denominators.
- 4.NF.2 I can compare two fractions with different numerators and denominators by creating common denominators or numerators or by comparing them to a benchmark fraction like one-half.
- 4.NF.2 I can recognize that comparisons of fractions are valid only when the two fractions refer to the same whole.
- 4.NF.3 \Box I can understand a fraction a/b, with a> I, as a sum of fractions I/b.
- 4.NF.3.a I can understand addition and subtraction of fractions as joining and separating parts referring to the same whole.
- 4.NF.3.b \square I can decompose a fraction into a sum of fractions with the same denominator in more than one way and justify my work using models.
- 4.NF.3.c I can add and subtract mixed numbers with like denominators.
- 4.NF.3.d \square I can solve word problems involving addition and subtraction of fractions that refer to the same whole and that have like denominators.

Numbers 4 Operations (Fractions) (cont.)

4th Grade—"I Can Do Math"

I can build fractions from unit fractions.

4.NF.4 \square I can apply my understanding of multiplication to multiply a fraction by a whole number.

4.NF.4.a \Box I can understand a fraction a/b as a multiple of I/b (e.g. I know that 5/4 is the product of 5 x I/4).

4.NF.4.b \Box I can understand a multiple of a/b as a multiple of I/b and use that knowledge to multiply a fraction by a whole number (e.g. n x (a/b) =) n x a/b).

4.NF.4.c \square I can solve word problems involving multiplication of a fraction by a whole number.

I can understand how fractions and decimals are related

4.NF.5 \square I can show a fraction with a denominator of 10 as an equivalent fraction with a denominator of 100 in order to add the two fractions.

4.NF.6 $_\square$ I can use decimals to show fractions with denominators of 10 and 100.

4.NF.7 $_{\square}$ I can compare two decimals to hundredths by reasoning about their size and realizing that the comparison is only true if the two decimals refer to the same whole.

4.NF.7 \Box I can compare decimals using the symbols >, =, and <, and justify the comparisons by using models.

Measurement 4

123456789

4th Grade—"I Can Do Math"

I can solve problems involving measurement and conversion of measurements.

- 4.MD. I ¬ I can show that I know the relative size of measurement units within one system of units (including km, m, cm, kg, g, lb, oz, l, ml, hr, min, sec). 4.MD. I - I can show the measurements in a larger unit in terms of smaller units and record those in a table. 4.MD. 2 \square I can use the four operations (+, -, x, /) to solve word
- problems involving measurement. 4.MD. 2.a 🗆 I can solve measurement problems involving simple fractions and decimals.
- 4.MD. 2.a I can solve problems that ask me to express measurements given in a larger unit in terms of a smaller unit.
- 4.MD. 2.b I can show measurement quantities using diagrams that involve a measurement scale (e.g. a number line).
- 4.MD. 3 I can use what I know about area and perimeter to solve real-world problems involving rectangles.

I can represent and interpret data.

- 4.MD. 4 I can make a line plot to show a data set of measurements involving fractions.
- 4.MD. 4 I can solve problems involving addition and subtraction of fractions by using information shown in line plots.

Measurement 4 Data (cont.)

4th Grade—"I Can Do Math"

I can understand the concept of measurement in geometry with regard to angles.

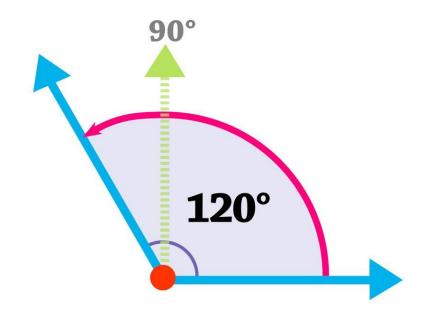
4.MD.5 \square I can recognize angles as geometric shapes where two rays share a common endpoint.

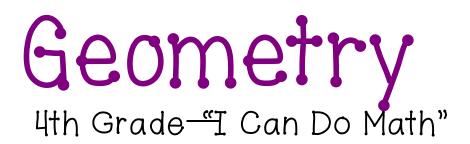
4.MD. 5. a - I can understand concepts of angle measurement.

4.MD. 5. a \square I can understand that angles are measured with reference to a 360 degree circle, with it's center at the common endpoint of the rays.

4.MD. 5. b \square I can understand that an angle that turns through n one-degree angles is said to have an angle measurement of n degrees.

4.MD. 6 - I can use a protractor to measure and sketch angles in whole-number degrees.
4.MD. 7 - I can solve real-world and mathematical addition and subtraction problems to find unknown angles.





I can use geometry to help me understand math.

- 4.6.1 \square I can identify and draw points, lines, line segments, rays, angles, and perpendicular/ parallel lines.
- 4.6.2 \square I can classify two-dimensional shapes based on what I know about their geometrical attributes.
- 4.6.2 I can recognize and identify right triangles.
- 4.6.3 □ I can recognize, identify, and draw lines of symmetry.

