# I CAN DO THIS!

**Fifth Grade Mathematics** **Name**_____

| | # | Number Sense Whole numbers | Problems or Examples  | | | | |
|---|---|---|---|---|---|---|---|
| | 1.0 | I can add, subtract, multiply and divide very large and very small numbers. | | | | | |
| | 1.1 | I can estimate and round numbers to millions and thousandths. | | | | | |
| | 1.2 | I can explain what percent means, can calculate the percent of a whole number, and can find decimal and percent equivalents for common fractions. | A test had 48 problems. Joe got 42 correct.<br>1. What percent were correct?<br>2. What percent were wrong?<br>3. If Victoria got 93.75% correct, how many problems did she get correct? | | | | |
| | 1.3 | I can calculate using exponents. | Extend the tables shown below:<br>$2^4=16$ $10^4=10{,}000$<br>$2^3=8$ $10^3=1{,}000$<br>$2^2=4$ $10^2=100$<br>$2^1=?$ $10^1=?$<br>$2^0=?$ $10^0=?$ | | | | |
| | 1.4 | I know the prime factors of all numbers through 50 and am able to write their prime factorizations using exponents. | Write as a product of primes using exponents (use factor trees or equivalents): 18, 48, 100. | | | | |
| | 1.5 | I can recognize and write decimals, fractions, mixed numbers and positive and negative integers on a number line. | Arrange in order from smallest to largest: 9⁄4, 25%, 0.3, 2 1⁄2, 0.295 | | | | |

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**Fifth Grade Mathematics** **Name**_____

| | # | Number Sense Whole numbers | Problems or Examples  | | | | |
|---|---|---|---|---|---|---|---|
| | 2.1 | I can add, subtract, multiply and divide with decimals. | Find the average of 6.81, 7, 5.2 and round the answer to the nearest hundredth. | | | | |
| | 2.1 | I can add and subtract with negative integers. | Evaluate 0.25 (3- 0.75). | | | | |
| | 2.2 | I can solve division problems using whole numbers, positive decimals, and multi-digit divisors. | Find the quotient.<br>6 ÷ 0.25= | | | | |
| | 2.3 | I can add and subtract fractions and mixed numbers. I can write the answer in simplest form. | 12/16 + 3 1/8 = 3 14/16 = 3 7/8 | | | | |
| | 2.4 | I understand the concept of multiplication and division of fractions. | Given the following three pairs of fractions (3⁄8 and 1⁄6, $5\ ^{3}/_{4}$ and $2\ ^{1}/_{3}$, 16 and $12\ ^{7}/_{8}$, ) for each pair find its:<br>1. Sum<br>2. Difference<br>3. Product<br>4. Quotient in simplest forms. | | | | |
| | 2.5 | I can multiply and divide fractions and solve word problems using the appropriate procedures. | [9,185/2,117 x 12/13] ÷ 9,185/2,117=?<br>[9,185/13 x 12/2,117] ÷ 9,185/2,117=? | | | | |

# I CAN DO THIS!

**Fifth Grade Mathematics** **Name**_____

| | # |  **Algebra and Functions** | **Problems or Examples**  | | | | |
|---|---|---|---|---|---|---|---|
| | 1.1 | I can use the information taken from a graph or equation to answer questions about a problem situation. | Joe's sister Mary is twice as old as he is. Mary is 16. How old is Joe? | | | | |
| | 1.2 | I can use variables to write and solve simple algebraic expressions, like 3x+2=14. | 3x+2=14. What is x? | | | | |
| | 1.3 | I can use the distributive property to solve equations. | | | | | |
| | 1.4 | I can identify, write and graph ordered pairs in the four quadrants of the coordinate plane. | Plot the points (1,2), (-4, -3), (12, -1), (0,4), (-4, 0). | | | | |
| | 1.5 | I can write linear function equations and graph them on a coordinate plane. | | | | | |

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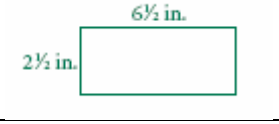
**Fifth Grade Mathematics** **Name**_____

| | # | Measurement and Geometry | Problems or Examples | | | | |
|---|---|---|---|---|---|---|---|
| | 1.1 | I can explain and use the formula for the area of a triangle and of a parallelogram by comparing it with the formula for the area of a rectangle. | Find the area and perimeter. Explain.<br>  | | | | |
| | 1.2 | I can construct a cube and rectangular box from a pattern, like a fishing net and use the pattern, or fishing net to compute the surface area. | | | | | |
| | 1.3 | I can understand what volume means, and can find the volume of rectangular solids, and be able to write the answer using notation, like cm and yd. | Determine the volume of a rectangular solid with base 65 cm, height 70 cm, and width 50 cm. | | | | |
| | 1.4 | I know the difference between 2-dimensional and 3-dimensional objects, and can measure them with appropriate units. | For a rectangular solid with base 65 cm, height 70 cm, and width 50 cm, determine its surface area. (Make sure that your answer is expressed in the correct units.) | | | | |

# I CAN DO THIS!

**Fifth Grade Mathematics** **Name**_____

| | # |  **Measurement and Geometry** | **Problems or Examples**  | | | | |
|---|---|---|---|---|---|---|---|
| | 2.1 | I can measure, identify and draw angles, perpendicular lines, rectangles and triangles by using appropriate tools. | Explain how to construct various complex geometric figures by using a ruler and compass; e.g., an equilateral triangle, a regular hexagon, a line passing through a given point and perpendicular to a given line. | | | | |
| | 2.2 | I know the sum of the angles of many triangles as well as the sum of the angles of any quadrilateral and can use this information to solve problems. | Find the third angle of a triangle if you know that one angle is 60° and the second angle is 20°. | | | | |
| | 2.3 | I can draw 2-D views and 3-D objects made from rectangular solids. | | | | | |

# I CAN DO THIS!

**Fifth Grade Mathematics** **Name**_____

| | # |  **Statistics, Data Analysis, and Probability** | **Problems or Examples**  | | | | |
|---|---|---|---|---|---|---|---|
| | 1.1 | I can calculate and compare the mean, median and mode of a set of data. | | | | | |
| | 1.2 | I can explain which types of graphs are appropriate for various sets of data and I can organize single-variable data accordingly. | Draw a circle graph to display the following data: A certain municipal district spends 6 million dollars per year—$2,507,000 on education, $1,493,000 for public safety, $471,000 for libraries, $536,000 for road maintenance, and $993,000 for miscellaneous expenses. (This problem also applies to Number Sense Standards 1.1 and 1.2.) | | | | |
| | 1.3 | I can use fractions and percents to compare data. | | | | | |
| | 1.4 | I can identify ordered pair of data from a graph and understand the meaning of the data. | | | | | |

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**Fifth Grade Mathematics** **Name**_____

| | # |  **Mathematical Reasoning** | **Problems or Examples**  | | | | |
|---|---|---|---|---|---|---|---|
| | 1.1 | I can identify when a word problem doesn't have enough information to solve it, or has unimportant information. I can also explain which information in the word problem is the most important. | | | | | |
| | 1.2 | I can decide when and how to break a problem into simpler parts. | Betty paid $23.60 for an item that was reduced by 20%.<br>1. What was the original price?<br>2. If the original price was reduced by 25%, what is the sale price? | | | | |
| | 2.1 | I can use estimation to prove if an answer is reasonable. | Which is longer: the width of your classroom or 8 times the length of your desk? | | | | |
| | 2.2 | I can use strategies from simple problems to help solve more difficult problems. | | | | | |
| | 2.3 | I can communicate my math thinking in different ways, using models, diagrams, tables, charts, graphs, symbols, numbers, and words. | Assume that the sum of the length of any two sides of a triangle is greater than the length of the third side. If the lengths of the sides of a triangle are required to be whole numbers, how many such triangles are there with a perimeter of 14? List all of them. | | | | |

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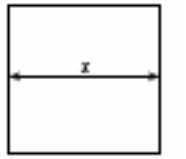
**Fifth Grade Mathematics** **Name**_____

| | # | Mathematical Reasoning | Problems or Examples | | | | |
|---|---|---|---|---|---|---|---|
| | 2.4 | I can clearly explain and justify my solutions using mathematical vocabulary and symbols, both written and oral. | How many segments "x" will fit on the perimeter of the square?   | | | | |
| | 2.5 | I know when an exact answer is needed and when it is better to estimate. | | | | | |
| | 2.6 | I can calculate accurately and check the reasonableness of my answer by rereading the original problem. | What is the largest square of a whole number that divides 48?<br>What is the largest cube of a whole number that divides 48? | | | | |
| | 3.0 | I can use problem-solving strategies that I have learned before to figure out new problems that are similar. | | | | | |