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Start Quick and Ramp It Up! 5<sup>th</sup> Grade Order of Operations and Equations

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# TABLE OF STANDARDS (PG. 1 OF 2)

The activities in this 5th grade Order of Operations and Equations book address the following standards.

Where are we going? Focus Standards		Activity
<b>(5.4)</b>	<b>Algebraic reasoning. The student applies mathematical process standards to develop concepts of expressions and equations. The student is expected to:</b>	
<b>5.4B</b>	represent and solve multi-step problems involving the four operations with whole numbers using equations with a letter standing for the unknown quantity; <b>Readiness Standard</b>	<b>8, 9, 10, 11, 12</b>
<b>5.4E</b>	describe the meaning of parentheses and brackets in a numeric expression; <b>Supporting Standard</b>	<b>1, 2, 4</b>
<b>5.4F</b>	simplify numerical expressions that do not involve exponents, including up to two levels of grouping. <b>Readiness Standard</b>	<b>1, 2, 3, 4, 5, 6, 7</b>

How will we get there? Operations Standards		Activity
<b>(5.3)</b>	<b>Number and operations. The student applies mathematical process standards to develop and use strategies and methods for positive rational number computations in order to solve problems with efficiency and accuracy. The student is expected to:</b>	
<b>5.3E</b>	solve for products of decimals to the hundredths, including situations involving money, using strategies based on place-value understandings, properties of operations, and the relationship to the multiplication of whole numbers; <b>Readiness Standard</b>	<b>3, 12</b>

What kind of mathematical thinking will we use? Process Standards		Activity
<b>(5.1)</b>	<b>(5.1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:</b>	
<b>5.1A</b>	apply mathematics to problems arising in everyday life, society, and the workplace;	<b>1, 6, 8, 9, 10, 11, 12</b>
<b>5.1B</b>	use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution;	<b>1, 2, 3, 4, 5, 6, 7, 9, 10, 11, 12</b>
<b>5.1C</b>	select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems;	<b>1, 2, 3, 4, 5, 6, 7, 9, 10, 11, 12</b>
<b>5.1D</b>	communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate;	<b>1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12</b>
<b>5.1E</b>	create and use representations to organize, record, and communicate mathematical ideas;	<b>9, 10, 12</b>
<b>5.1F</b>	analyze mathematical relationships to connect and communicate mathematical ideas.	<b>1, 2, 4, 5, 6, 7, 9, 10, 11, 12</b>
<b>5.1G</b>	display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication.	<b>1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12</b>