

Content Standard	<p>MAFS.7.EE Expressions and Equations</p> <p>MAFS.7.EE.2 Solve real-life and mathematical problems using numerical and algebraic expressions and equations.</p> <p>MAFS.7.EE.2.3 Solve multi-step real-life and mathematical problems posed with positive and negative rational numbers in any form (whole numbers, fractions, and decimals), using tools strategically. Apply properties of operations to calculate with numbers in any form; convert between forms as appropriate; and assess the reasonableness of answers using mental computation and estimation strategies. <i>For example: If a woman making \$25 an hour gets a 10% raise, she will make an additional $\frac{1}{10}$ of her salary an hour, or \$2.50, for a new salary of \$27.50. If you want to place a towel bar $9\frac{3}{4}$ inches long in the center of a door that is $27\frac{1}{2}$ inches wide, you will need to place the bar about 9 inches from each edge; this estimate can be used as a check on the exact computation.</i></p>	
Assessment Limits	<p>Numbers in items must be rational numbers. No variables. Items should require two or more steps.</p>	
Calculator	Yes	
Item Type	<p>Equation Editor Multiple Choice Multiselect</p>	
Context	Required	
Sample Item		Item Type
<p>Rolando is 13. In five years, his age will be $\frac{3}{2}$ the age of his sister Marisa. How old will Marisa be in three years?</p>		Equation Editor
<p>A set of pencils sells for \$1.75 and costs \$0.40 to make. Twenty percent of the profit (the difference between the purchase price and the amount it costs to make) from each set of pencils goes to a school. If 500 sets are sold, what is the amount of money that will go to the school?</p>		Equation Editor
<p>A bucket holds 243.5 ounces (oz) of water when full. The bucket loses 0.3 oz of water per second. In how many seconds will the bucket be 40% full?</p>		Equation Editor
<p>A plane is flying at 31,348 feet. It needs to rise to 36,000 feet in two stages. In stage 1, it rises 5% of its initial altitude of 31,348 feet. In stage 2, it rises at a rate of 140.3 feet per minute. How many minutes does it take for the plane to rise during stage 2?</p>		Equation Editor

Sample Item	Item Type												
<p>The dimensions of a rectangular pool are 24.5 feet by 13 feet. The depth of the water is 4 feet. Each cubic foot contains 7.48 gallons of water.</p> <p>How many gallons of water, to the nearest tenth, are needed to fill the pool to 80% capacity?</p> <div data-bbox="207 453 1002 525" style="border: 1px solid #ccc; height: 34px; margin-bottom: 5px;"></div> <div data-bbox="207 531 1002 835" style="border: 1px solid #ccc; padding: 5px;"><div data-bbox="212 537 467 575" style="border: 1px solid #ccc; background-color: #f0f0f0; padding: 2px; margin-bottom: 5px;">← → ↶ ↷ ✖</div><table border="1" data-bbox="212 583 358 821"><tbody><tr><td>1</td><td>2</td><td>3</td></tr><tr><td>4</td><td>5</td><td>6</td></tr><tr><td>7</td><td>8</td><td>9</td></tr><tr><td>0</td><td>.</td><td>-</td></tr></tbody></table></div>	1	2	3	4	5	6	7	8	9	0	.	-	Equation Editor
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