

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.2.4 Use variables to represent quantities in a real-world or mathematical problem, and construct simple equations and inequalities to solve problems by reasoning about the quantities.</p> <p>MAFS.7.EE.2.4a Solve word problems leading to equations of the form $px + q = r$ and $p(x + q) = r$, where p, q, and r are specific rational numbers. Solve equations of these forms fluently. Compare an algebraic solution to an arithmetic solution, identifying the sequence of the operations used in each approach. <i>For example, the perimeter of a rectangle is 54 cm. Its length is 6 cm. What is its width?</i></p> <p>MAFS.7.EE.2.4b Solve word problems leading to inequalities of the form $px + q > r$ or $px + q < r$, where p, q, and r are specific rational numbers. Graph the solution set of the inequality and interpret it in the context of the problem. <i>For example: As a salesperson, you are paid \$50 per week plus \$3 per sale. This week you want your pay to be at least \$100. Write an inequality for the number of sales you need to make, and describe the solutions.</i></p>	
Assessment Limits	<p>Numbers in items must be rational numbers. Inequalities must have context.</p>	
Calculator	<p>Yes</p>	
Item Type	<p>Equation Editor GRID Multiple Choice Multiselect Open Response</p>	
Context	<p>Allowable</p>	
Sample Item	Item Type	
<p>The perimeter of a rectangular garden is 37.5 feet (ft). The width is x, and the length is 15 ft.</p> <p>What is the width, in feet, of the garden?</p>	Equation Editor	
<p>A community is planning to build a rectangular garden. The width of the garden is $\frac{27}{4}$ feet (ft), and the perimeter of the garden is 37.5 ft. The community planners want to spread mulch on the entire garden.</p> <p>How many square feet of mulch will be needed?</p>	Equation Editor	

Sample Item	Item Type																																		
<p>At her job, Jessie earns \$9.50 per hour. She also earns a \$60 bonus every month.</p> <p>Jessie needs to earn at least \$460 every month.</p> <p>Create an inequality that represents this situation, where h represents the number of hours that Jessie works in a month in order to earn at least \$460.</p> <div style="border: 1px solid #ccc; height: 25px; margin-top: 10px;"></div> <div style="border: 1px solid #ccc; padding: 5px; margin-top: 5px;"> <div style="border-bottom: 1px solid #ccc; padding-bottom: 5px; margin-bottom: 5px;"> ← → ↶ ↷ ✖ </div> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <tr> <td style="width: 20px;">1</td><td style="width: 20px;">2</td><td style="width: 20px;">3</td><td style="width: 20px;">h</td><td colspan="4"></td> </tr> <tr> <td>4</td><td>5</td><td>6</td><td>+</td><td>-</td><td>•</td><td>÷</td><td></td> </tr> <tr> <td>7</td><td>8</td><td>9</td><td><</td><td>≤</td><td>=</td><td>≥</td><td>></td> </tr> <tr> <td>0</td><td>.</td><td>-</td><td>$\frac{\square}{\square}$</td><td>\square^\square</td><td>()</td><td> </td><td>$\sqrt{\square}$</td><td>$\sqrt[\square]{\square}$</td><td>π</td> </tr> </table> </div>	1	2	3	h					4	5	6	+	-	•	÷		7	8	9	<	≤	=	≥	>	0	.	-	$\frac{\square}{\square}$	\square^\square	()		$\sqrt{\square}$	$\sqrt[\square]{\square}$	π	<p>Equation Editor</p>
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