

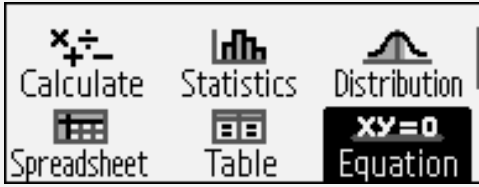
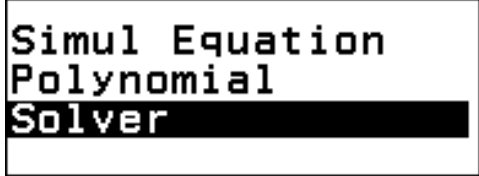
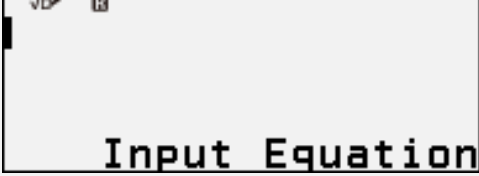

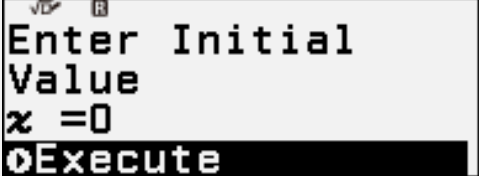
Unit 6: Lesson 9 – Dealing with Negative Numbers



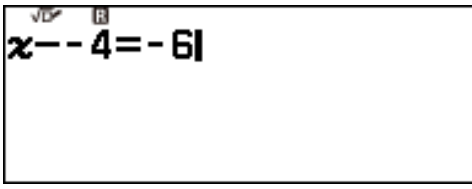
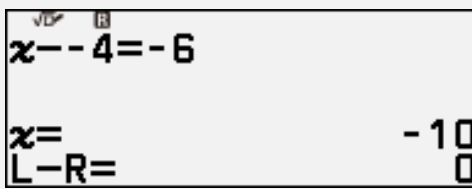

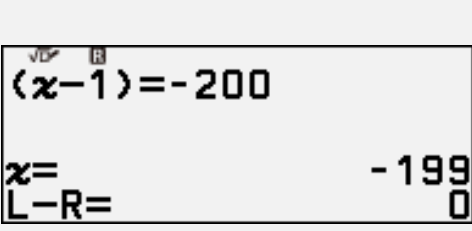
Activity 9.2: Old and New Ways to Solve

Skill: Use the Equation app to check solutions from solving equations algebraically

Activity Summary:

This activity has students solve four equations involving negative numbers using methods from prior lessons in the unit. Each equation can be solved using the “What value would make it true?” or “Doing the same thing to both side” approach. After solving the equations using either method, the Equation app on the calculator can be used to check their answers.

<p>1. This task will utilize the Equation app to quickly check answers to equations solved algebraically. Press \odot – Home and then use the arrow keys to highlight the Equation app.</p>	 <p>The image shows the calculator's home screen with several app icons: Calculate, Statistics, Distribution, Spreadsheet, Table, and Equation. The Equation app icon, which includes the text 'XY=0', is highlighted with a black background.</p>
<p>2. Press either \odot or EXE to select. Press either the scroll down button, \checkmark, or press the up arrow, \wedge, to highlight Solver.</p>	 <p>The image shows the 'Simul Equation Polynomial Solver' screen on the calculator.</p>
<p>3. Press either \odot or EXE to select.</p>	 <p>The image shows the 'Input Equation' screen on the calculator.</p>
<p>4. To check the first equation, $x + 6 = 4$, type \odot \oplus \odot \uparrow \odot \odot. (The key combination of \uparrow \odot gives the equal sign, =.)</p>	 <p>The image shows the equation input screen with 'x+6=4' entered.</p>
<p>5. Press either \odot or EXE to enter. The initial value is used as a starting point for equations with multiple solutions. Since these linear equations have just one solution, press the down arrow, \vee, to highlight Execute.</p>	 <p>The image shows the 'Enter Initial Value' screen with 'x = 0' entered and the 'Execute' option highlighted.</p>

<p>6. Press either OK or EXE to solve the equation. $x = -2$ is the solution to the first equation.</p>	
<p>7. Press either OK or EXE to return to the equation entry window. Use the backspace key, ⏮, to back over the prior equation to prepare to enter the next equation in this task, $x - (-4) = -6$.</p>	
<p>8. Finish entering this equation by typing ⏮ 4 ⏮ ⏮ ⏮ ⏮ ⏮ ⏮ ⏮ on the keypad. (⏮ ⏮ is used to enter the negative sign.)</p>	
<p>9. Press either OK or EXE to enter. Press the down arrow, ⏴, to highlight Execute and then press either OK or EXE to solve this equation. The solution for the second equation is $x = -10$.</p>	
<p>10. Press either OK or EXE to return to the equation entry window. Use the backspace key, ⏮, to back over the prior equation to prepare to enter the next equation in this task, $2(x - 1) = -200$.</p>	
<p>11. Enter the third equation by typing 2 (x - 1) = - 2 0 0 on the keypad. Press either OK or EXE to enter. Press the down arrow, ⏴, to highlight Execute and then press either OK or EXE to solve this equation. The solution for the third equation is $x = -199$.</p>	
<p>12. Using the last two steps above, the fourth equation, $2x + (-3) = -23$, can be found to have the solution of $x = -10$.</p>	