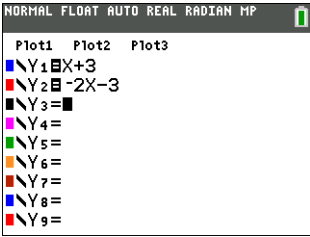
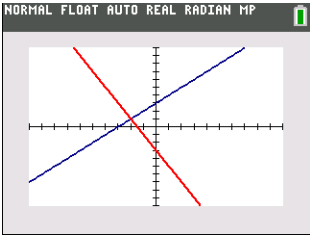
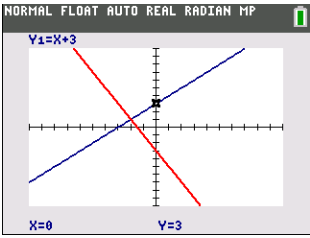
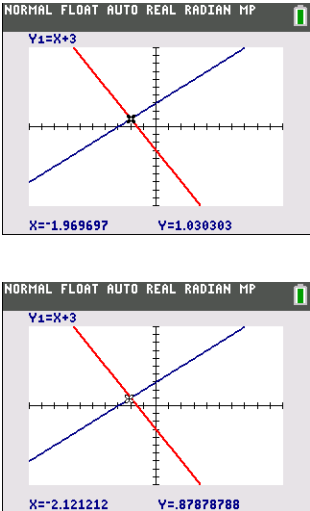


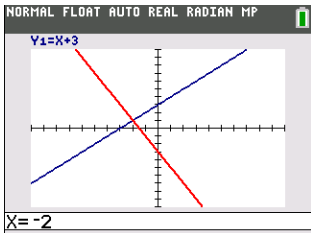
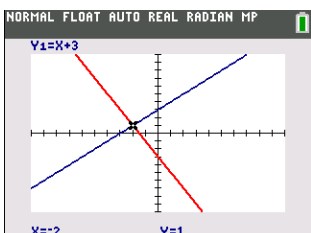
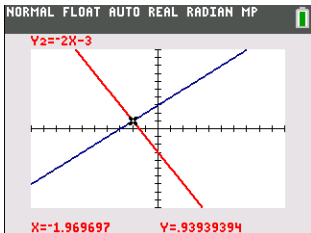
Solving a System of Equations by Graphing

Tutorial Overview

In this tutorial, you will learn how to solve a system of equations by graphing using the TI-84 Plus Graphing Calculator.

Action	Screens
<p>Step 1: Press $Y=$ and enter the first equation. Arrow down and enter the second equation.</p>	 <p>The screen shows the Y= editor with the following equations entered:</p> <ul style="list-style-type: none"> $Y_1 = X + 3$ $Y_2 = -2X - 3$ $Y_3 =$ $Y_4 =$ $Y_5 =$ $Y_6 =$ $Y_7 =$ $Y_8 =$ $Y_9 =$
<p>Step 2: Press GRAPH and you will see the graphs of the two equations.</p> <p>Note: The graphs are shown in the standard viewing window.</p>	 <p>The screen shows the standard viewing window with the two lines graphed. The intersection point is visible at approximately $x = -2$.</p>
<p>Step 3: Press TRACE. You will see a cursor appear on Y_1 and you will see the equation upon which you are tracing in the upper left of the screen.</p>	 <p>The screen shows the TRACE function active on $Y_1 = X + 3$. The cursor is positioned on the blue line. The coordinates shown are $X=0$ and $Y=3$.</p>
<p>Step 4: Use the left-right arrows to trace along the line. You will notice that you do not seem to land on the exact intersection of the two lines but it is close to the location where $x = -2$.</p>	 <p>The first TRACE screen shows the cursor on the blue line at $X = -1.969697$ and $Y = 1.030303$. The second TRACE screen shows the cursor on the blue line at $X = -2.121212$ and $Y = .87878788$.</p>

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Action	Screens
<p>Step 5: When you are tracing, you can press a number which is within the visible viewing window, like -2, and it will be entered as an x-value. When you press ENTER, you will see the y-value that is calculated by the equation being traced.</p>	 
<p>Step 6: To move to the graph of the second equation, press the down arrow. You will notice that the second equation is given in the upper left of the screen.</p>	
<p>Step 7: Again, you can enter -2 as the x-value, press ENTER to have the current equation calculate its y-value. You will see that it is the same ordered pair as it was with the other equation, (-2, 1), the solution of the system of equations.</p>	