

How to Do Page 300 Example 4 Using TI-83/84

Use the TI-83/84 to graph the formula $h = 4.5a + 25$ for domain $[14, 42]$ and range $[88, 214]$.

- Place the calculator in Dot Mode. This will eliminate the vertical lines at the start and end of the domain.
 - Press **MODE**.
 - Cursor over DOT.
 - Press **ENTER**. You will see Figure 1.

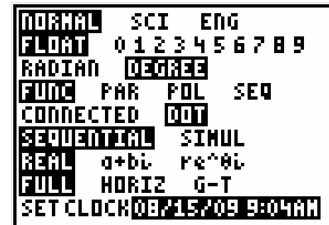


Figure 1

- Set the window variables.
 - Press **WINDOW**.
 - Use the given domain and range values to set an appropriate window setting. You will see Figure 2.

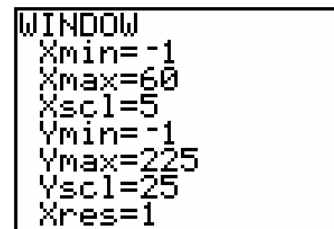


Figure 2

- Enter the equation of the relation and the domain in the form (equation)(domain).
 - Press **Y=**.
 - Clear any previous plots.
 - Enter the equation in brackets: $(4.5x + 25)$.
 - Enter the domain.
 - Press **(** **X,T,θ,n** **2ND** **MATH** and select 3: >.
 - Then, enter 14.
 - Press **2ND** **MATH** and cursor over to LOGIC.
 - Select 1: and.
 - Press **X,T,θ,n** **2ND** **MATH** and select 5: <.
 - Then, enter 42 and press **)**.
 - Press **ENTER**. You will see Figure 3.

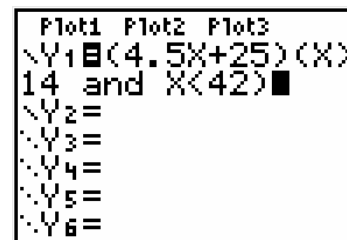


Figure 3

- Display the graph.
 - Press **GRAPH**. You will see Figure 4.
 - Press **TRACE** to display values on the graph. You will see Figure 5.
 - Use the left and right arrows to move the trace point along the graph.

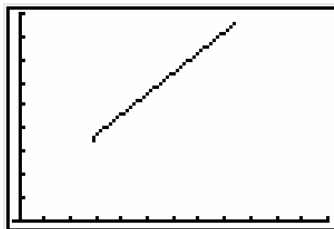


Figure 4

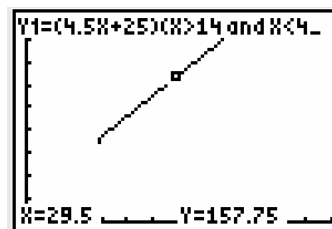


Figure 5