Objective: To be able to use the value command to evaluate a function and view its graph on the TI-83/84.

Problem: The dosage D in milligrams of Ivermectin, a heartworm preventive, for a dog who weighs x pounds is given by \( D(x) = \frac{136}{25} x \)

Steps:
1) Enter the equations in y_1 under Y=. The variable y must replace the variable D(x). Notice the use of parentheses.

Display:

2) Set the values in the WINDOW. Select appropriate values that will display the equation by

What would be a minimum weight for a dog?
What would be a maximum weight for a dog?
What would be a minimum dosage?
What would be a maximum dosage?
So that we can see each axis we will use:

\[
X_{\min} = -5 \quad Y_{\min} = -5 \\
X_{\max} = 150 \quad Y_{\max} = 1000 \\
X_{sel} = 10 \quad Y_{sel} = 100
\]

Note: Other reasonable values are possible for this problem.
3) Press GRAPH.
4) Press 2nd CALC (above trace). Select 1: value and press ENTER.
5) Enter a value for x at the cursor. A possible display is shown below.

Display:
6) To enter another value of x, just type the number and press ENTER. The graphic calculator will display the coordinates and the cursor will locate that point on the graph.

7) The value command will only return a value for y if the value of x is between the Xmin and Xmax values on the WINDOW.