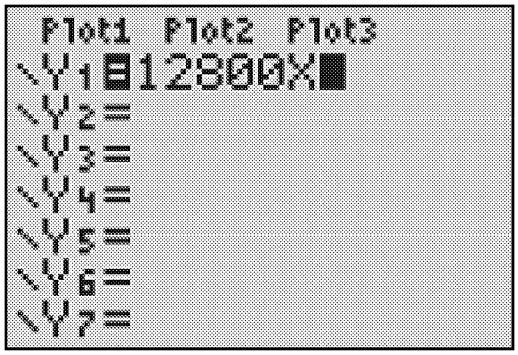
Name: _____ Date: _____

BLM 6–9

Method 3: Use a Graphing Calculator

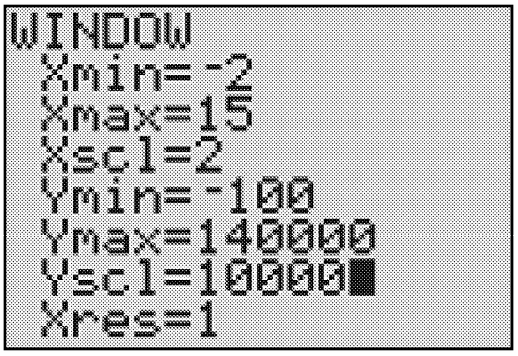
Clear all the calculator's lists. Model the fuel consumption using the equation $f = 12\,800t$.

Enter the equation:
- Select Y=.
- Enter the equation ***y* = 12800*x***.

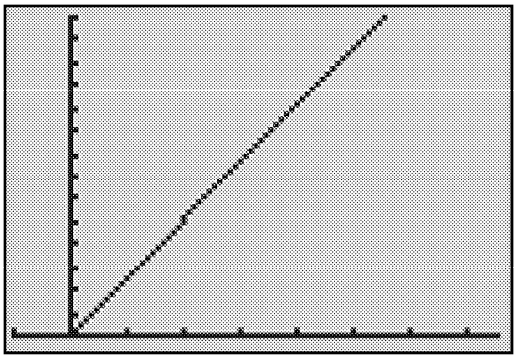


Adjust the window settings:
- Select WINDOW.
  Enter the following parameters:

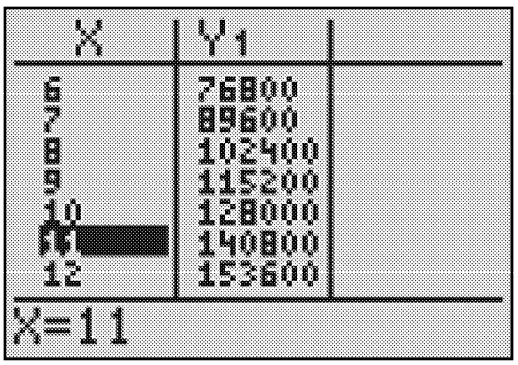
x min	−2	*y* min	−100
x max	15	*y* max	140 000
x scale	2	*y* scale	10 000



Display the graph:
- Press GRAPH.
- 2nd GRAPH will display the table of values. Scrolling in the table of values can be used to find the fuel consumption for a given time.



For part b), 140 800 L of fuel are used in 11 h.

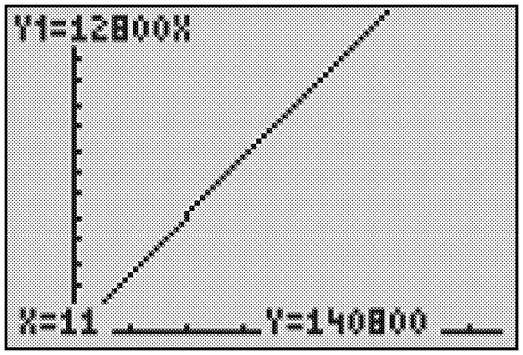


Name: _____ Date: _____

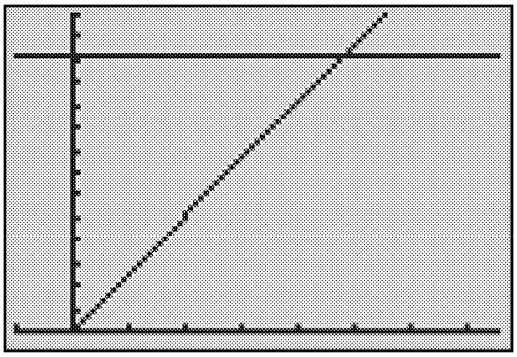
BLM 6–9
(continued)

Alternate method:
- Press 2nd TRACE and select **1: Value**.
- Enter 11 for x. Press ENTER.

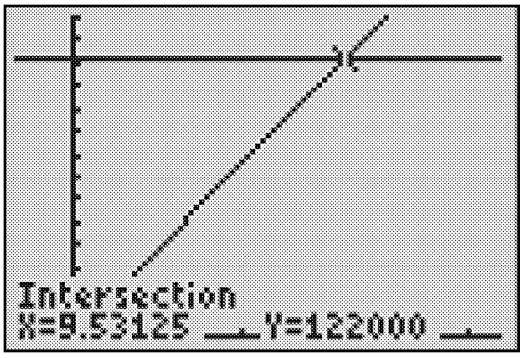
There are 140 800 L of fuel used in 11 h.



Find the amount of time:
- To find the amount of time, given 122 000 L of fuel, press Y=.
  Enter the equation $y = 122\,000$ in Y_2.
- Press GRAPH.



Find the intersection point of the two equations:
- Press 2nd TRACE and select **5: Intersect**.
- Using the arrows, move the cursor to the point of intersection of the two lines.
- Press ENTER to confirm that you are on the first curve of $y = 12\,800t$.
- Press ENTER to confirm that you are on the second curve of $y = 122\,000$.
- Press ENTER to confirm that you are accepting the guess.



For part c), the fuel will last for 9.5 h.