

When Will The Candle Burn Out?

1. Gather the data for the length of time for a candle to burn out using various size glass jars.
2. Average the time for each jar.
3. Clear all lists (use MEM key)
4. Enter the data in List1 (size in milliliters) and List2 (time for the candle to burn out in seconds) using STAT → EDIT.
5. Change Window to accommodate data.
6. View graph (use GRAPH).
7. Plot points on paper graph (other side). Draw a line of best fit and make a prediction using the graph. _____
8. Use the linear regression function on the graphing calculator to find the equation of the line (STAT→CALC→4).
9. Make a prediction for the unknown jar using the equation (ax+b) obtained from calculator. Obtain time for the unknown jar.
10. Which method for prediction was more accurate? Why?

Jar Size	Trial 1	Trial 2	Trial 3	Average

Unknown jar size _____ a = _____ b = _____ Prediction from calculator _____