

Spiral Activity 2: Cricket Chirps vs. Temperature

Concepts

- Entering data into lists
- Graphing

Overview

This activity is an opportunity to practice your skills in entering experimental data into lists and then graphing on the TI-84 calculator.

Materials

- TI-84 Plus

Introduction

Most of the time you will be analyzing data that was collected using the CBL 2™/LabPro® data collection unit. The data is automatically stored in the calculator.

However, there are other times when you will want to use data that someone else has collected that is not currently in your calculator.

This activity uses data for cricket chirps vs. temperature. Other data sets can be used.

Objectives

1. Use the list SETUP EDITOR.
2. Clear lists.
3. Enter data into lists.
4. Graph data with [STAT PLOT].
5. Use ZOOM STAT.
6. Calculate a linear regression line.

Procedure

The table given below contains data for cricket chirps vs. temperature.

Temperature	Cricket chirps per minute
55 °C	60
58 °C	65
64 °C	84
73 °C	132
77 °C	136
81 °C	148

1. Enter the temperature data into list L1 and the cricket chirps into list L2.
2. Use [STAT PLOT] to set up the graph for your data.
3. Display a graph of cricket chirps vs. temperature (L2 vs. L1).

Analysis

1. Perform a linear regression line for this data.