Regression on the TI-82
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Keys are written between brackets [ ].
Menu selections are written in italics.

1. Enter the data points.
   – Data sets are best entered in the Stat Editor.
   – Press [STAT] and select 1:EDIT. Your screen should look like this:

   ![Stat Editor Screen]

   – Clear any existing data in the L₁ and L₂ columns by using the arrow keys to move the highlight over L₁ and pressing [CLEAR] [ENTER].
   Then do the same to clear the L₂ column.
   – Enter your data in the appropriate L₁ or L₂ column.
   – If the L₁ or L₂ columns are not present then move the cursor to highlight the top of a column and press [2nd] [L₁] or [2nd] [L₂].
   – When finished press [2nd] [QUIT].

2. Plot the data (this step may be skipped if desired).
   – Turn on a Stat Plot and configure it to plot the data.
   – Press [2nd] [STAT PLOT]. You will see this screen:

   ![Stat Plots Screen]

   – Select 1:PLOT1 with the arrow keys and press [ENTER]. Use the arrow and [ENTER] keys to edit your next screen to look like this:

   ![Plot Options Screen]

   – The selections are: On, scatter plot, L₁, L₂, □.
  Your data will be automatically centered and graphed like this:

3. Perform the regression calculation.
   – Press [STAT] and RightArrow to CALC.
   – For a linear regression select 5:LinReg$(ax + b)$ and press [ENTER].
   – $\text{LinReg}(ax + b)$ is now pasted to the home screen. You must complete
     the command before pressing [ENTER].
   – Press [2nd] [L1] [,] [2nd] [L2]. Your regression command should now look
     like this:

   ![Regression Command](image)

   If it does, press [ENTER].

   – Now your screen should look something like this:

   ![Regression Results](image)

   The coefficients of a linear equation are displayed. This regression
   equation must be pasted into the equation editor (into $Y_1$) to be
graphed.
   – Press [Y=].
   – Clear any equations from the equation editor by selecting them with the
     arrow keys and pressing [CLEAR].
   – Press [VARS], 5:Statistics, RightArrow to EQ, and select 7:RegEQ. The
     regression equation will be pasted into the equation editor. Press
     [GRAPH].

   ![Graphed Equation](image)

   – Press [CLEAR] and [GRAPH] to toggle between views.