



CHAPTER

10

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# Simple Linear Regression



## *calculator keys*

### Simple Linear Regression

Enter the data values for your dependent variable  $Y$  and your independent variable  $X$  into separate list variables (see Chapter 1). Then, press [STAT][ $\blacktriangleleft$ ] (to display the TESTS menu) and select **F:LinRegTTest**( and press [ENTER] to display the LinRegTTest function. (Note: In TI-83 series calculators, select **E:LinRegTTest**( to display this function.)

In the function screen:

1. Enter the list variable of your independent variable as **Xlist** and the list variable of your dependent variable as **Ylist**.
2. Enter **1** as the **Freq**.
3. For **RegEQ** entry, press [VARS][ $\blacktriangleleft$ ] (to display the Y-VARS menu) and then select **1:Function** and press [ENTER]. In the FUNCTION screen that appears, select **1:Y1** and press [ENTER]. (This assigns the special built-in function variable **Y1** to **RegEQ**.)
4. Select **Calculate** and press [ENTER].

Regression results appear over two screens. If your two list variables do not have the same number of values, an error message appears and you need to quit the procedure.

See the **Calculator Keys** section in Chapter 11 for an alternative calculator regression analysis method.