## Warm Up 2:

## Linear Regression

Objective: Find the best-fitting line for a set of data points using the TI-83.

1. Press $\mathbf{Y}=$ and CLEAR to clear the $\mathrm{Y}_{1}$ prompt. Press $V$ and CLEAR to clear additional prompts. Enter the data points in a statistics data set, as shown in Warm Up

2. Calculate the best-fitting line for the data points by pressing STAT > 4 ENTER. Notice that the line $\mathrm{y}=\mathrm{ax}+\mathrm{b}$ is displayed. Enter the equation for $\mathrm{Y}_{1}$ by pressing $\mathbf{Y}=$ CLEAR VARS $5 \gg 1$.
3. Turn on the scatter plot as shown in Warm Up 1 and view the points and the best-fitting line by pressing ZOOM


6 . Remember to turn off the scatterplot.

## Practice 2:

Find and graph the best-fitting lines. Sketch what you see in the space provided.

1. $(-1,2),(3,4),(5,6)$
2. $(1,5),(2,4),(3,2)$
3. $(1,-2),(2,1),(4,3)$
4. $(-2,-2),(-1,1),(2,5)$
