Regression is the method of finding the best fitting formula for a data set. **Note:** Best fitting does not always mean that the formula goes through each data point.

The process of finding the best fitting curve follows these steps.

- 1. Enter data into the calculator.
- 2. Create a scatterplot of the data.
- 3. From the scatterplot, decide which types of formulas should be eliminated.
- 4. Examine the other regression models.
- 5. Pick the best model based on a variety of criteria, some are given here.
 - (a) ease of use
 - (b) closeness to the data
 - (c) follows trend of the data

| Example: The population of a town, given in hundreds of people, is shown in the table. Find a model |
|---|
| that will represent the population of the town. |

| year | population |
|------|------------|
| 1800 | 25 |
| 1830 | 60 |
| 1850 | 125 |
| 1875 | 350 |
| 1900 | 680 |
| 1925 | 1400 |
| 1950 | 2500 |