The following table gives information about the temperature in a city and the volume of ice cream (pounds) in a certain store that sells this product. A sample taken during eight days in the summer of 1993 showed the following results.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Temperature | 93 | 86 | 77 | 89 | 98 | 102 | 87 | 79 |
| Ice Cream | 187 | 169 | 123 | 198 | 232 | 267 | 158 | 118 |

1. Show the scatter diagram and explain whether it displays a linear relationship.
2. Enter the regression equation
3. Interpret the coefficients in the regression.
4. Predict the amount of ice cream sold for one day with a temperature of 950C.