|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| X | Y | X – X(bar) | (X – X(bar))2 | Y – Y(bar) | (X – X(bar)) (Y – Y(bar)) |
| 3 | 6 |  |  |  |  |
| 2 | 2 |  |  |  |  |
| 1 | 4 |  |  |  |  |
| -1 | 2 |  |  |  |  |
| 0 | -2 |  |  |  |  |
| ∑ Xi | ∑ Yi | ∑ (Xi – X(bar)) | ∑ (Xi – (bar))2 | ∑ (Yi – Y(bar)) | ∑ (Xi – X(bar) (Yi – Y(bar)) |
| 5 | 12 |  |  |  |  |

1. Consider the following data, where all summations are over the index i:
2. Complete the above table, putting the sums in the last row. What are mean of X(X(bar)) and mean of Y(Y(bar))?
3. Assume our estimated regression line is Y(hat)i = b0 + b1Xi and calculate b0 and b1 from this chart and provide an interpretation of each.