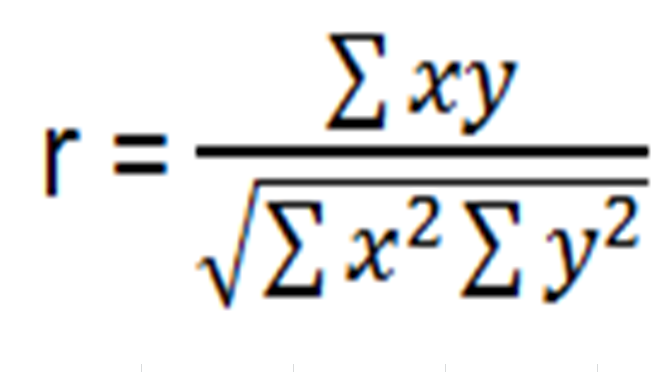
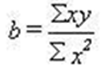
|  |
| --- |
| Y' = a + bX prediction formula |
|  |
| Y = a + bX+e general linear model |

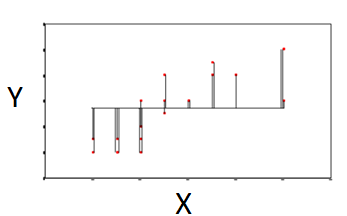
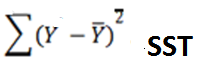
correlation



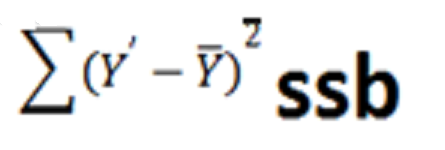
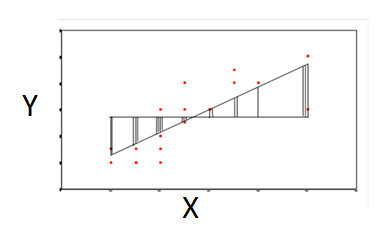
 sums of square cross products

 beta

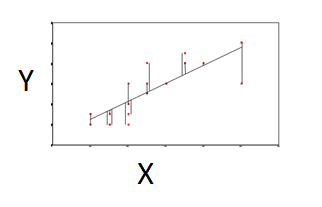




Sums of squares total

Sums of squares between



Sums of squares within or sums of squares error



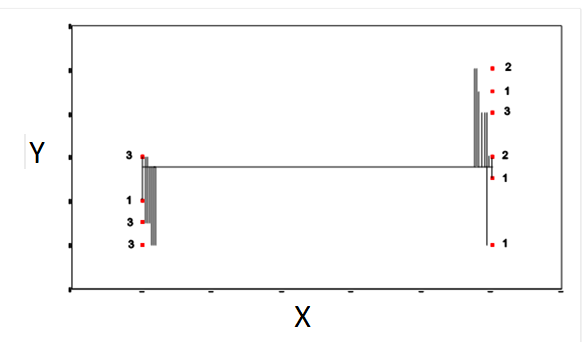
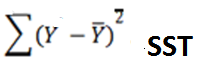
&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&

Non-standardized linear combination

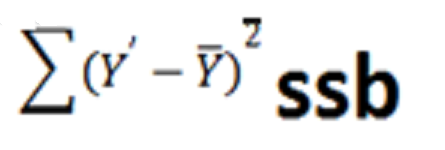
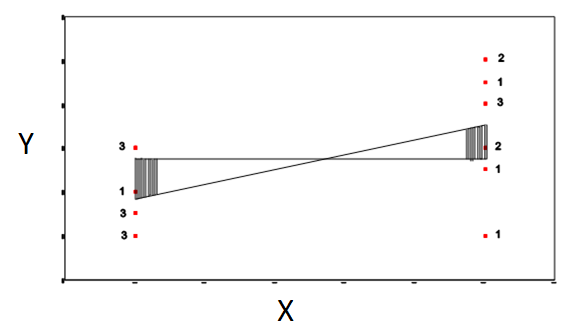
Y’=a + b1X1 + b2X2 + b3X3… bnXn

Standardized linear combination

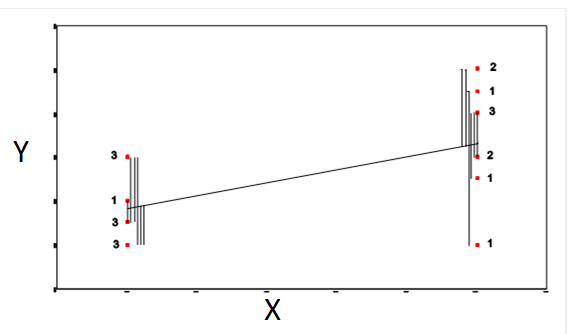
Y’=b1X1 + b2X2 + b3X3… bnXn



Sums of squares total

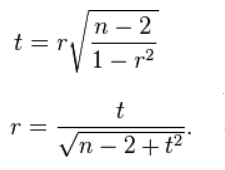
 

Sums of squares between



Sums of squares within or sums of squares error

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Pearson correlation coefficient | correlation | *r* |  | *R*2 = *t*2 / (*t*2 + *DF*), |
| Analysis of Variance | ANOVA | F | SSB/SSW  (only applies when groups=2) | f=t2 |
| t-test | t-test | t |  | *t*2 = *DF\*R*2 / (1 - *R*2) |

`

= eta squared = SSB/SST