

Statistical Notation and Computations

Terms you should know.

Summation
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Formulas and Symbols You Should Know.

* \bar{X}
.....

* Σ
.....
.....

* ΣX
.....
.....

* ΣX^2
.....
.....

* $(\Sigma X)^2$
.....
.....

* $\Sigma(X - Y)$
.....
.....

* $\Sigma(X - Y)^2$
.....
.....

Homework #3: Calculations You Should Master

Name: _____ (This is my work, and my work alone.)

1. Complete the following table.

X	Y	X ²	Y ²	(X+Y)	(X - Y) ²
21	32				
33	12				
52	23				
66	42				
45	9				
79	6				
92	12				
74	32				
36	20				
53	18				
Σ					

2. Using the data from this table what is the value of each of the following?

ΣX _____ ΣY _____ ΣX^2 _____ ΣY^2 _____

$\Sigma (X + Y)$ _____ $\Sigma (X - Y)^2$ _____

3. Were the following done correctly? If the computation was not done correctly, state why.

- a. A student was asked to compute $\Sigma X/N$. To do this she added up all of the scores in the distribution and divided by the number of scores.
- b. A professor computed $\Sigma(X - Y)^2$ and came up with a negative number for an answer.
- c. A student evaluated the following expression $\Sigma X - \Sigma X^2$ by computing the sum of all of the X scores, multiplying this sum by 2, and then subtracting the second sum from the sum of all of the X scores.