p-norms – a norm is a distance from something. When calculating, this should be positive. ||x|| is the Euclidean norm of a n-dimensional vector x. When there is a subscript p, then that means there is an exponent p applied to the sum of each term, and then that total sum is raised to 1/p.

https://stats.stackexchange.com/questions/181620/what-is-the-meaning-of-super-script-2-subscript-2-within-the-context-of-norms