A matrix norm is a way of measuring the numerical “size” of a matrix. There is no exact formula for calculating a matrix norm, since all that is needed for a matrix norm formula to be valid is to for the formula to have the following properties:

llαAll = lαl llAll

llA + Bll = llAll + llBll

llAll >= 0

llAll = 0 iff A = 0m,n

Sources used.

<https://en.wikipedia.org/wiki/Matrix_norm>

<https://ocw.mit.edu/courses/electrical-engineering-and-computer-science/6-241j-dynamic-systems-and-control-spring-2011/readings/MIT6_241JS11_chap04.pdf>