**What is the difference between the cost function and the loss function for logistic regression?**



They are different names for the same function.



The cost function computes the error for a single training example; the loss function is the average of the cost functions of the entire training set.



**Answer - The loss function computes the error for a single training example; the cost function is the average of the loss functions of the entire training set.**

Derivation of DL/dz (Optional)

**Derivation of** 

If you're curious, you can find the derivation for  in this Discourse post "[Derivation of DL/dz](https://discourse.deeplearning.ai/t/derivation-of-dl-dz/165)"

Remember that you do not need to know calculus in order to complete this course or the other courses in this specialization. The derivation is just for those who are curious about how this is derived.

**Why does numpy library prefer than math library in DL?**

**Actually, we rarely use the "math" library in deep learning because the inputs of the functions are real numbers. In deep learning we mostly use matrices and vectors. This is why numpy is more useful**.