## cross entropy

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# 1 Cross entropy Intuition

1. Cross entropy is used to compare two probability distributions. It tells us how similar two distributions are.

## 2 Mathematics

Cross entropy between two probability distributions p and q defined over same set of outcomes is given by:  $H(p,q) = -\Sigma_x p(x) \log(x)$ 

## 3 Ref

 $https://www.quora.com/Whats-an-intuitive-way-to-think-of-cross-entropy \\ http://jackon.me/posts/why-use-cross-entropy-error-for-loss-function$ 

## References