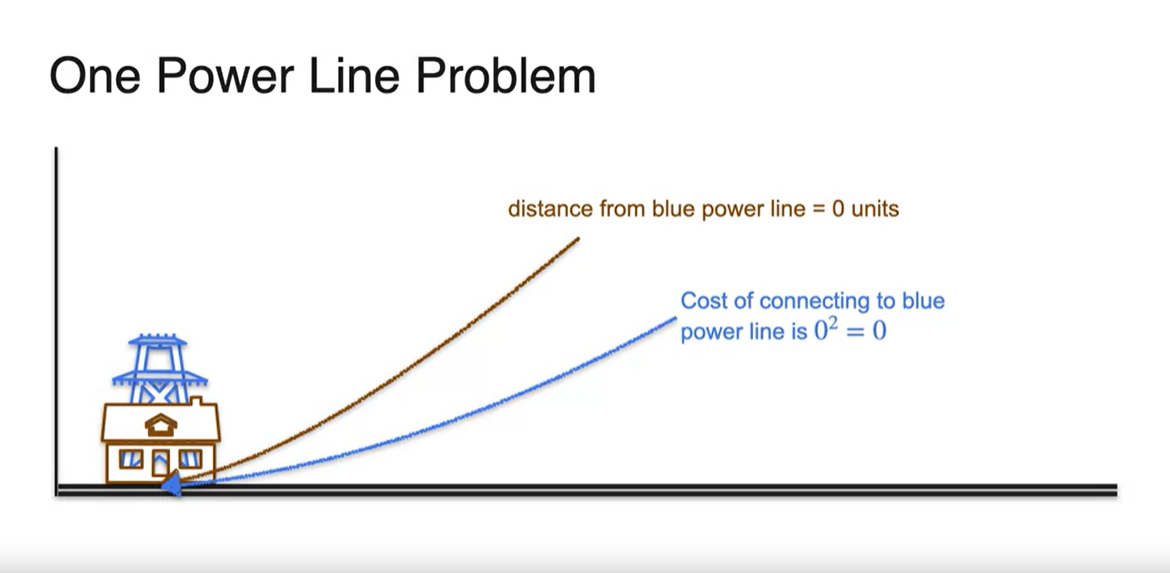
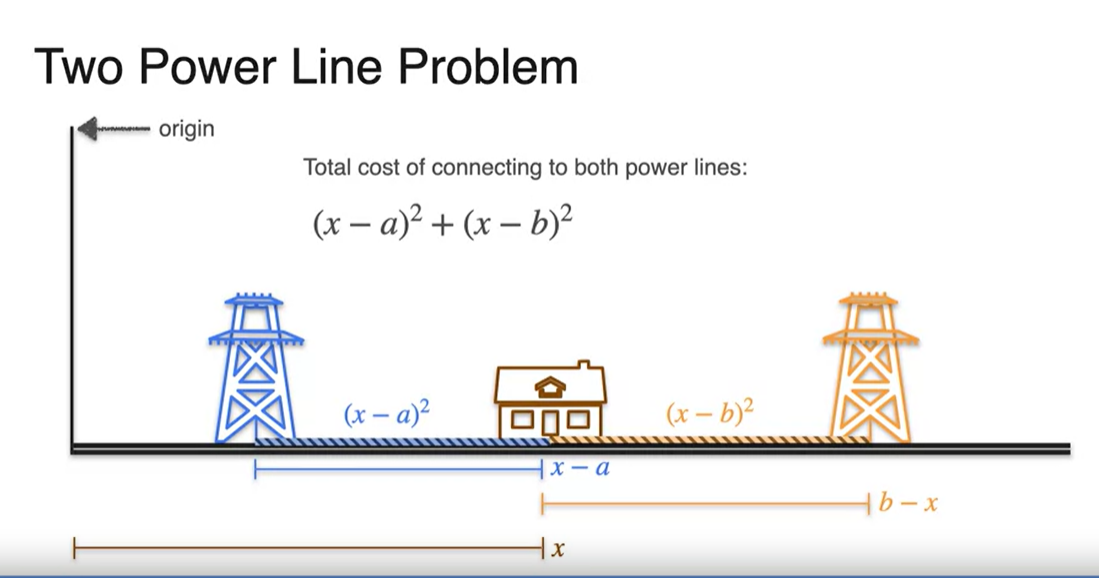
**Optimization**

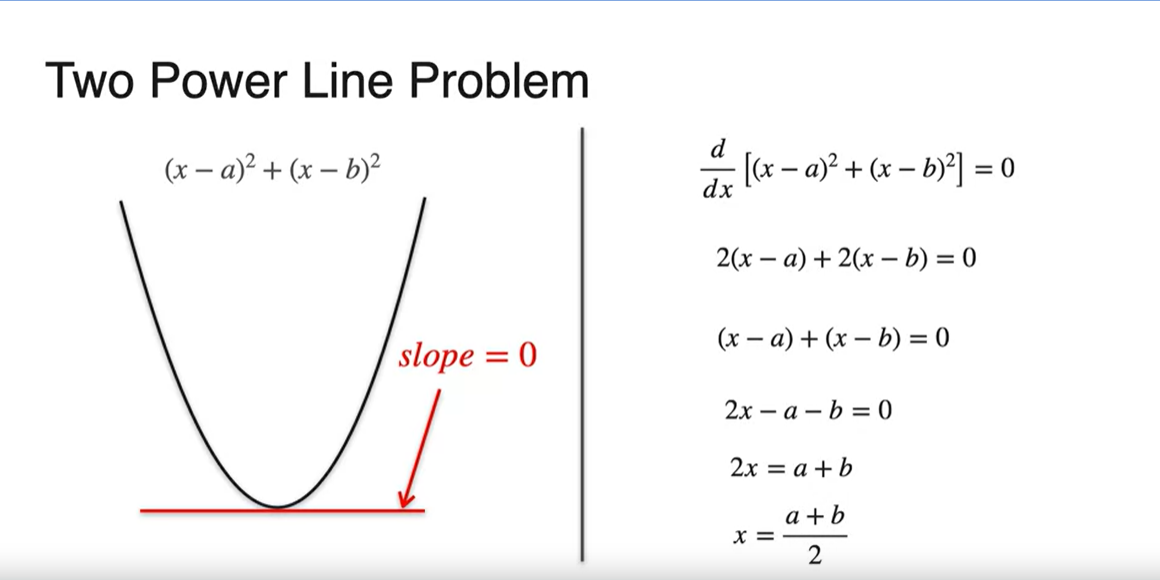
Optimization is the process of finding maximum and minimum values given constraints using calculus. For example, you'll be given a situation where you're asked to find: The Maximum Profit. The Minimum Travel Time. Or Possibly the Least Costly Enclosure.

1. Optimization of squared loss - The one powerline problem

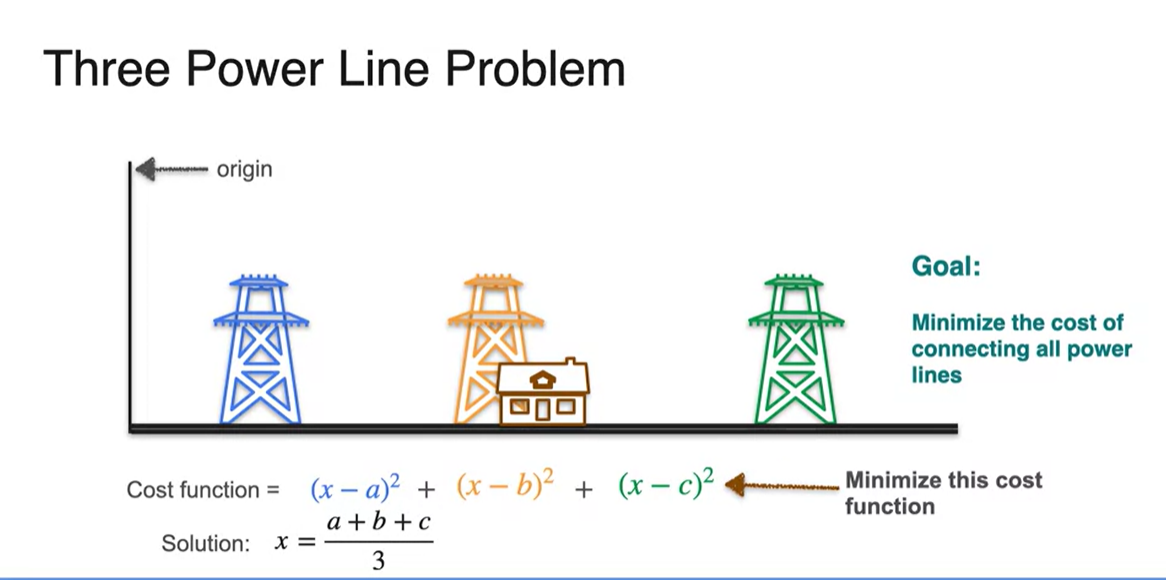
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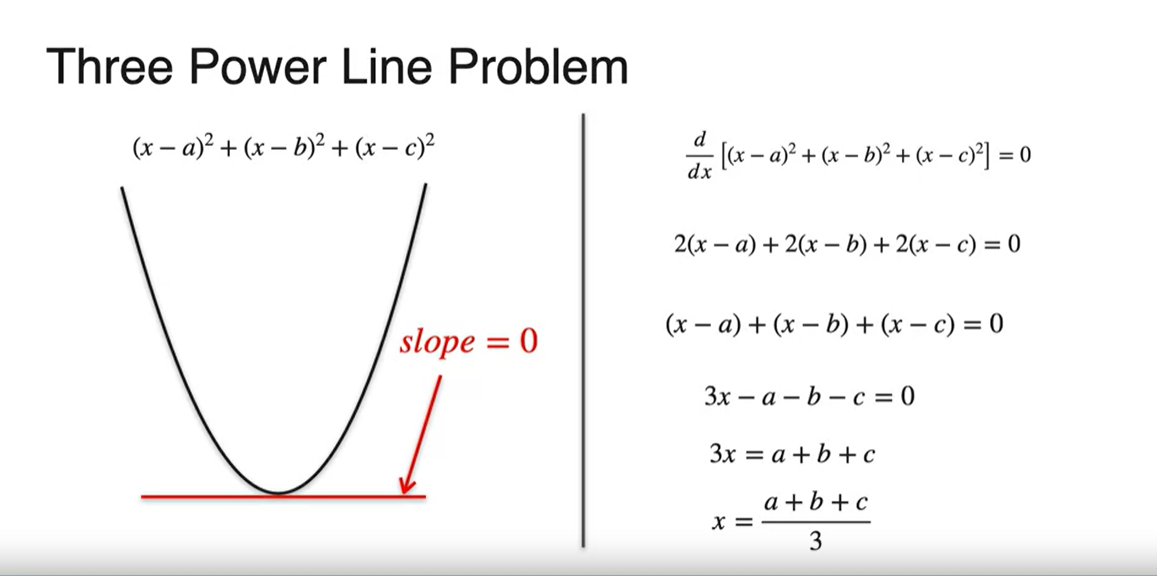
1. Optimization of squared loss - The two-powerline problem

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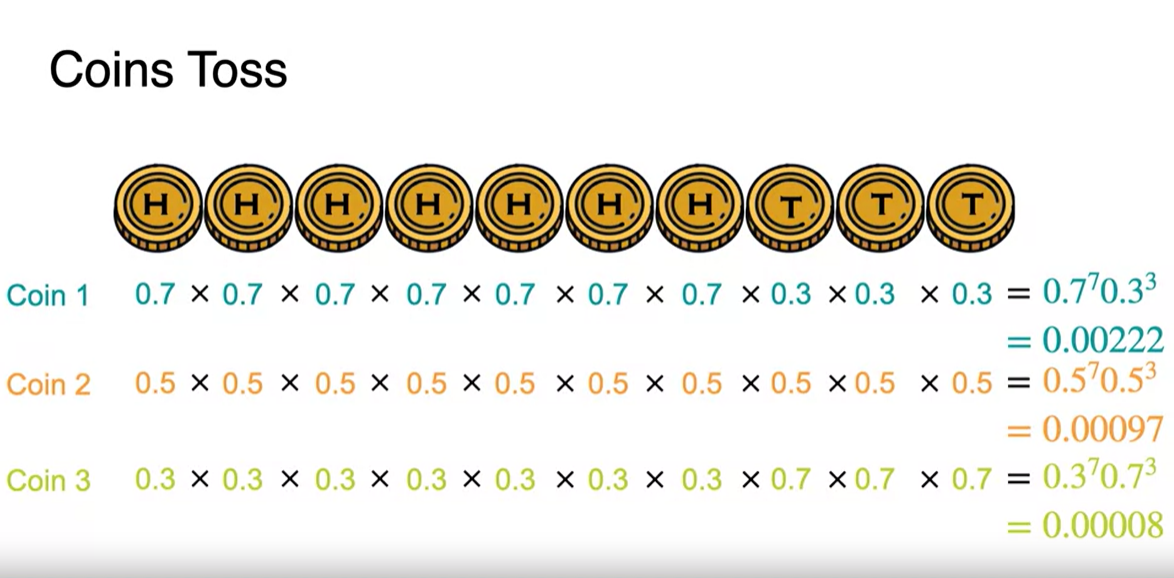
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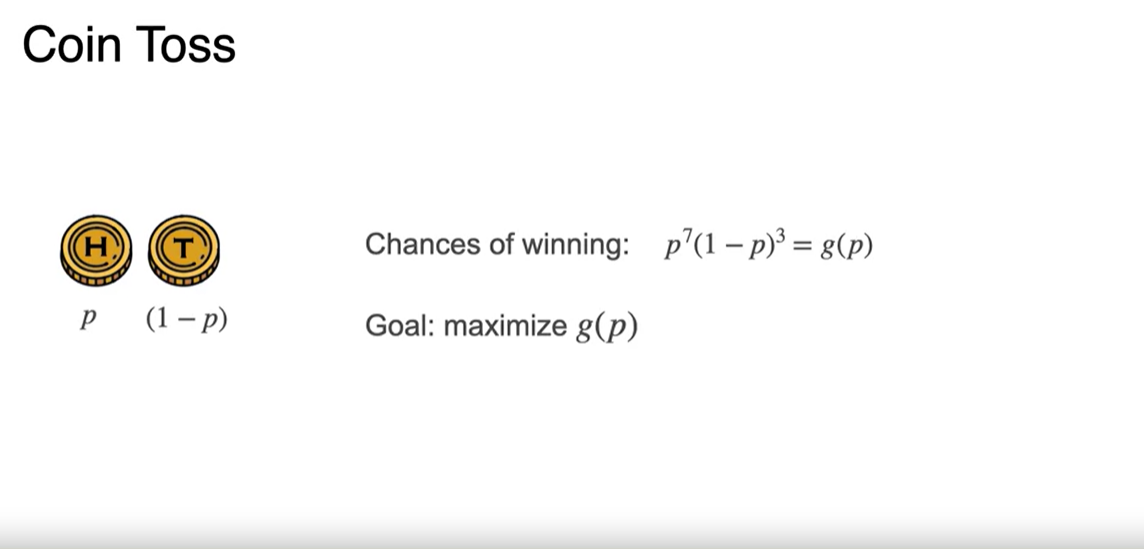
1. Optimization of squared loss - The three-powerline problem

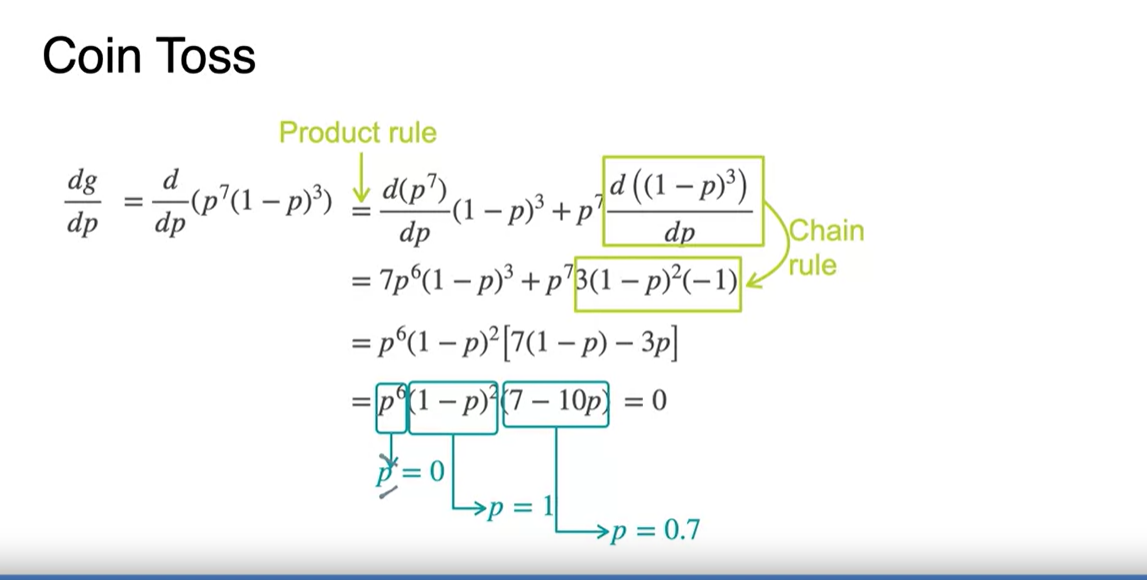
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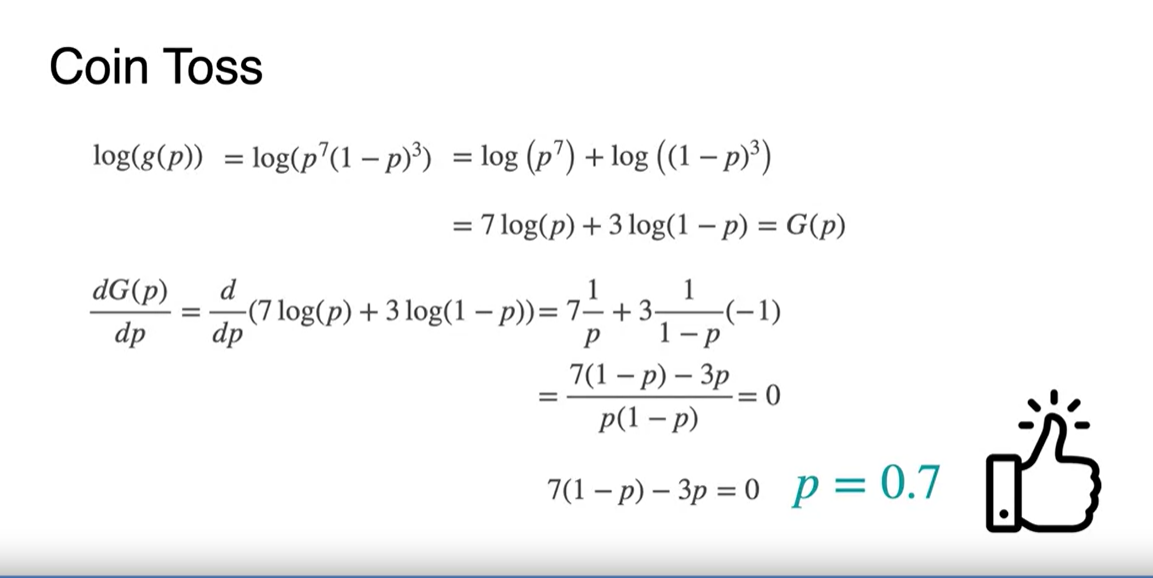
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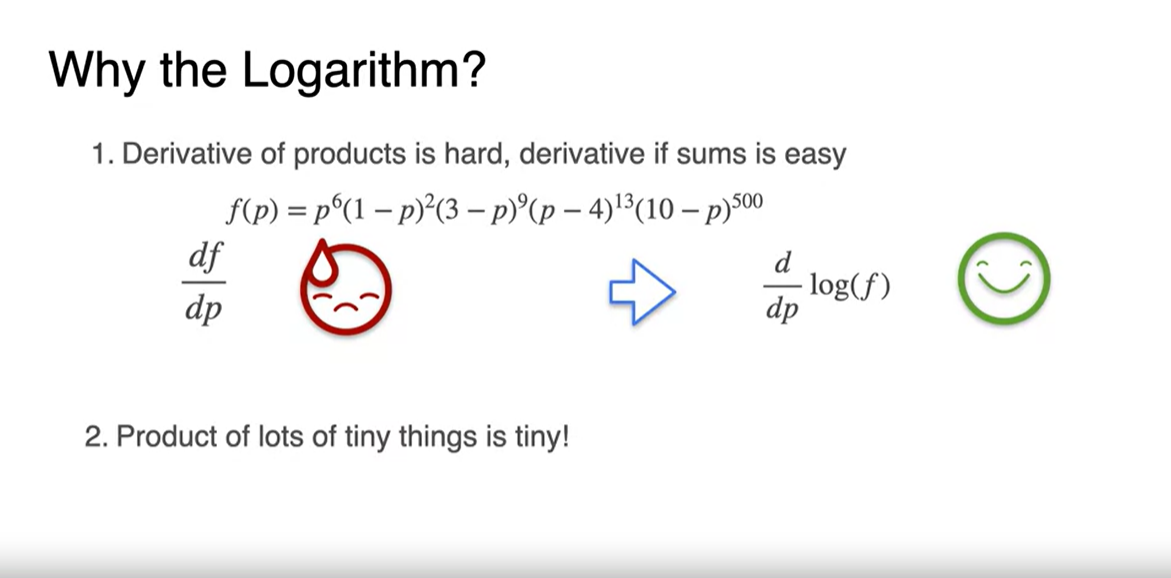
1. Optimization of log-loss

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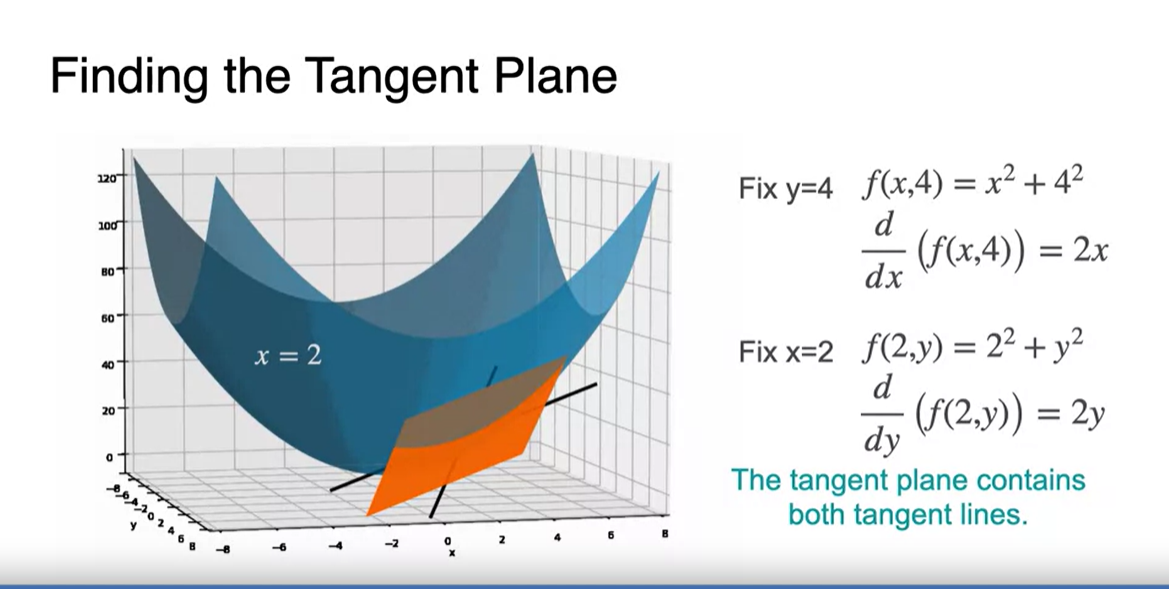
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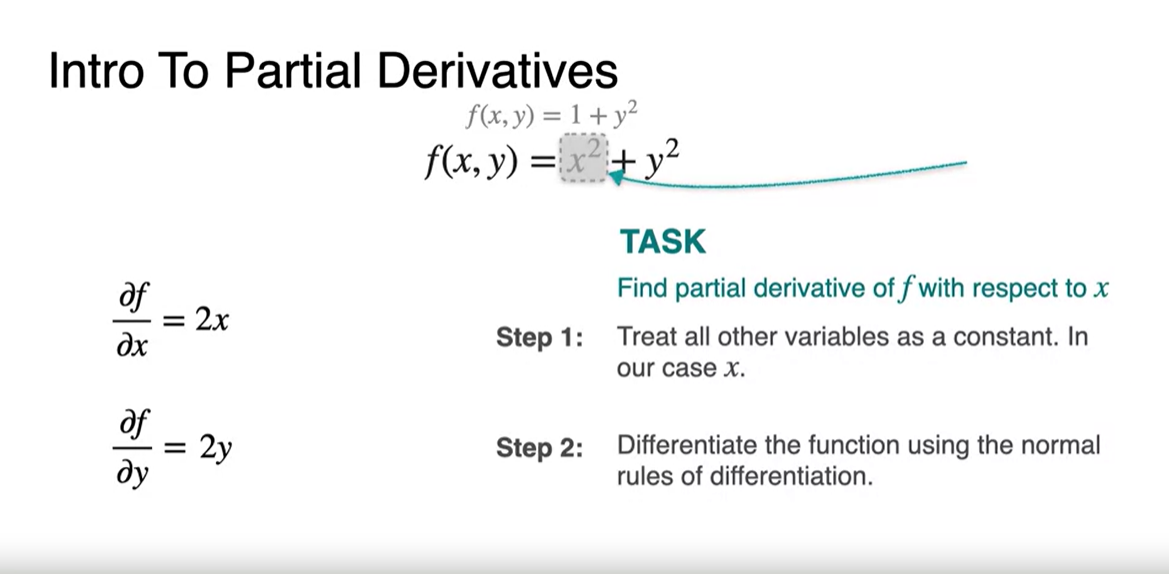


**Gradients**

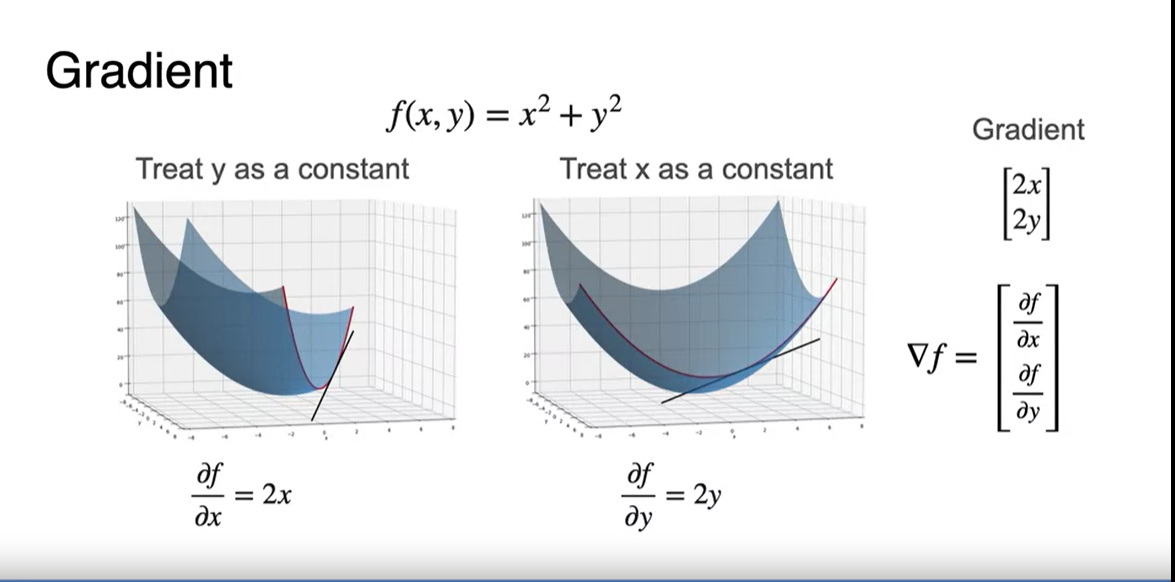
1. Introduction to tangent planes

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1. Partial derivatives

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1. Gradients



1. Gradients and maxima/minima

