

# Summary

3 minutes

Well done for getting through all of that! Let's have a quick recap of what we've covered.

- Supervised learning is a kind of learning by example: a model makes predictions, they're compared to expected labels, and the model is then updated to produce better results.
- A cost function is a mathematical way to describe what we want a model to learn. These calculate large numbers when a model isn't making good predictions, and small numbers when it's performing well.
- Gradient descent is an optimization algorithm: a way of calculating how to improve a model, given a cost function and some data.
- Step size (learning rate) changes how quickly and how well gradient descent performs.

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