Artificial Neural Networks

Regression

Deep Learning Pre-Work

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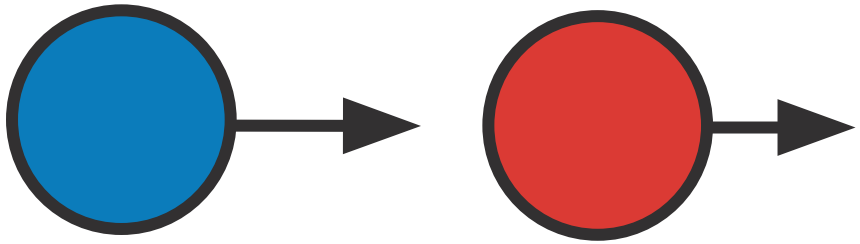

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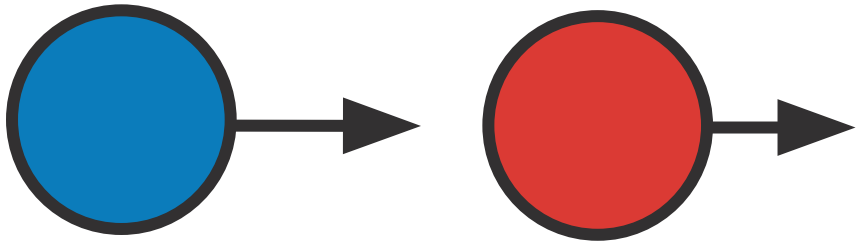

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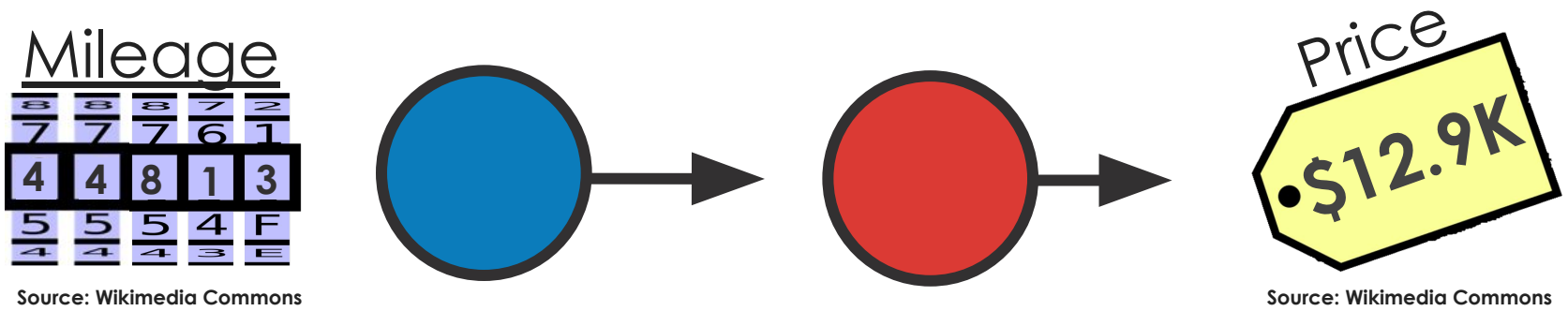

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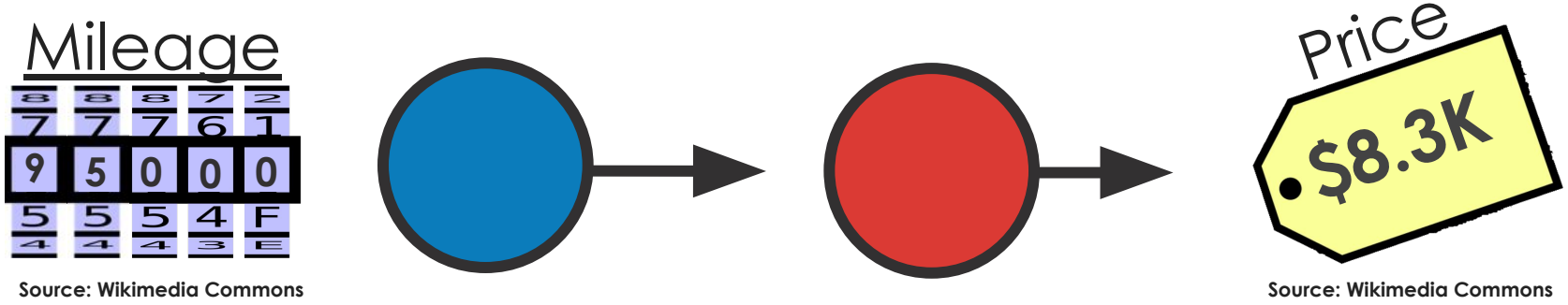

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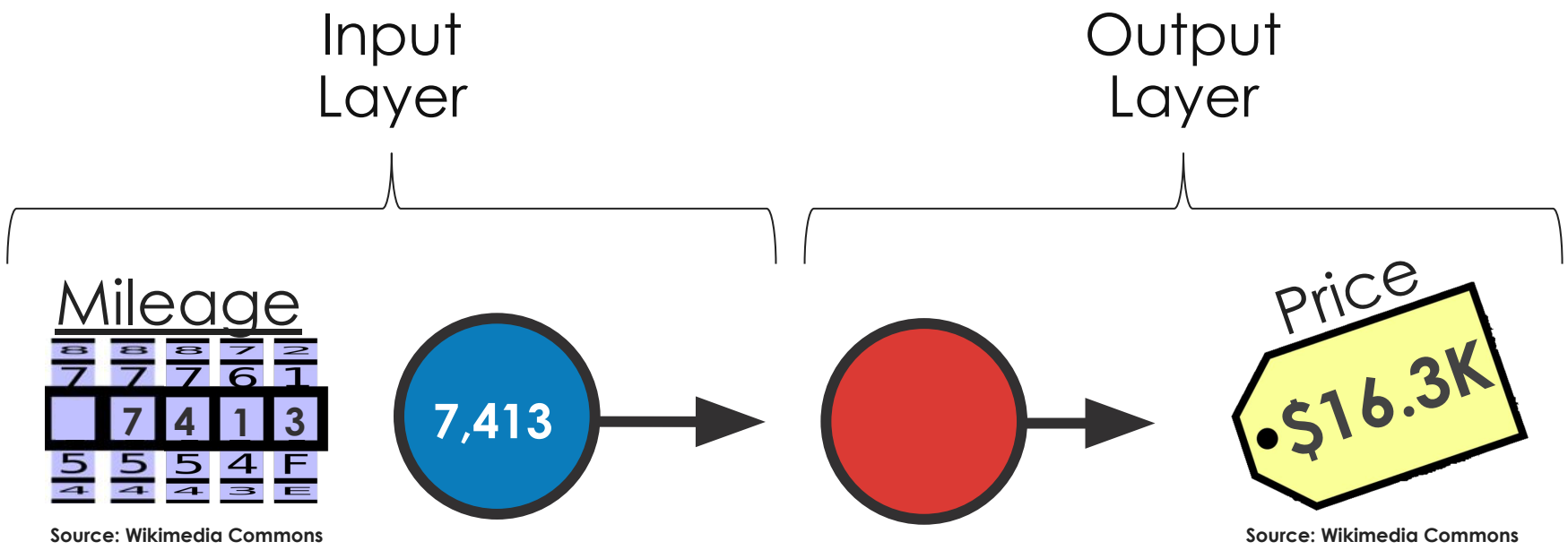
Input/Output Layers



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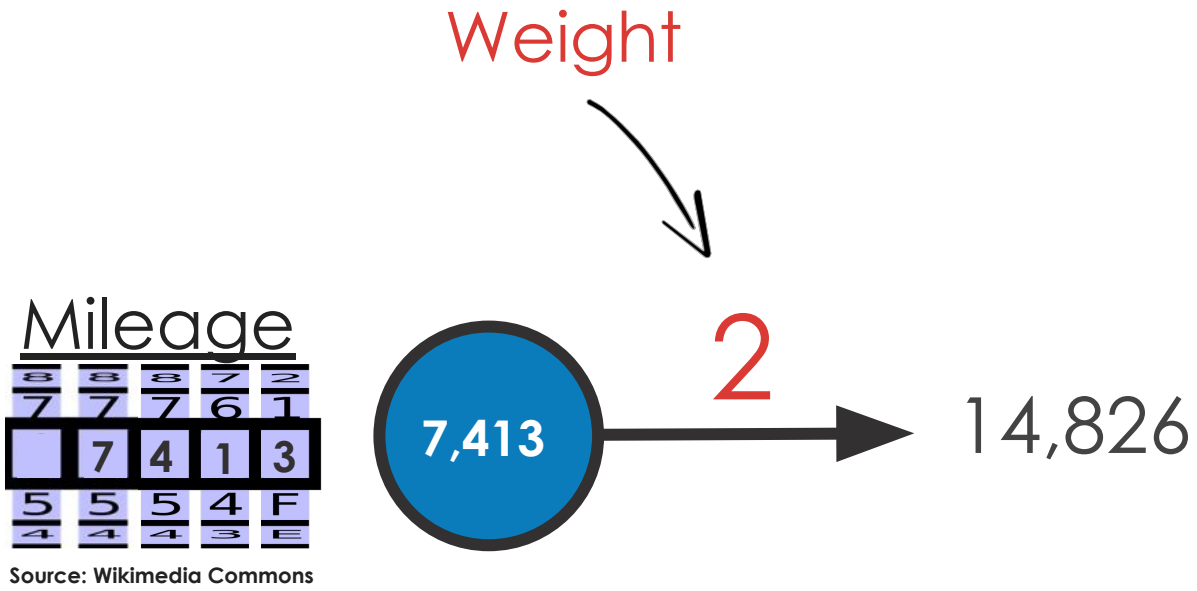
Weights



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Equation

X*Weight

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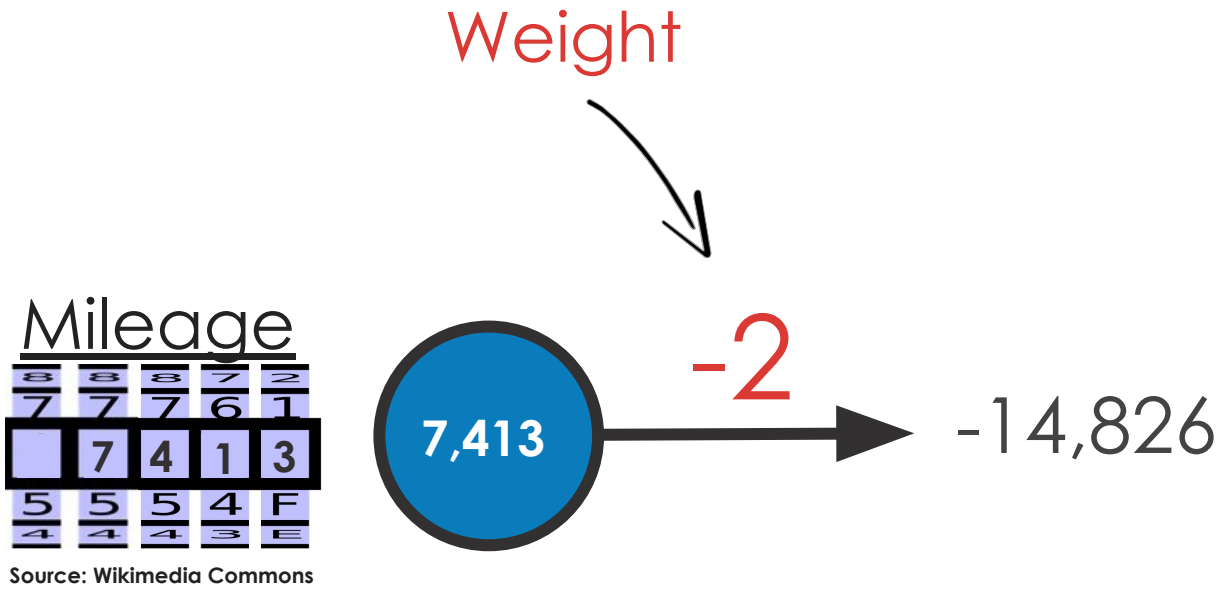
Weights



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Equation

X*Weight

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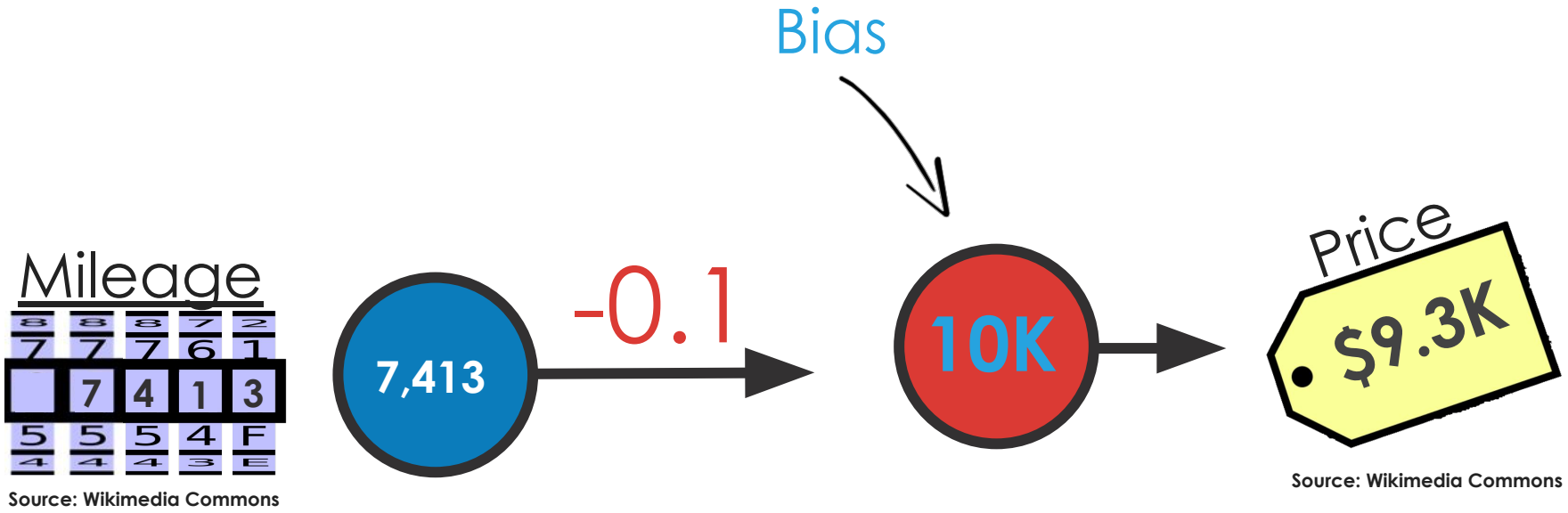
Biases



Equation

X*Weight + Bias

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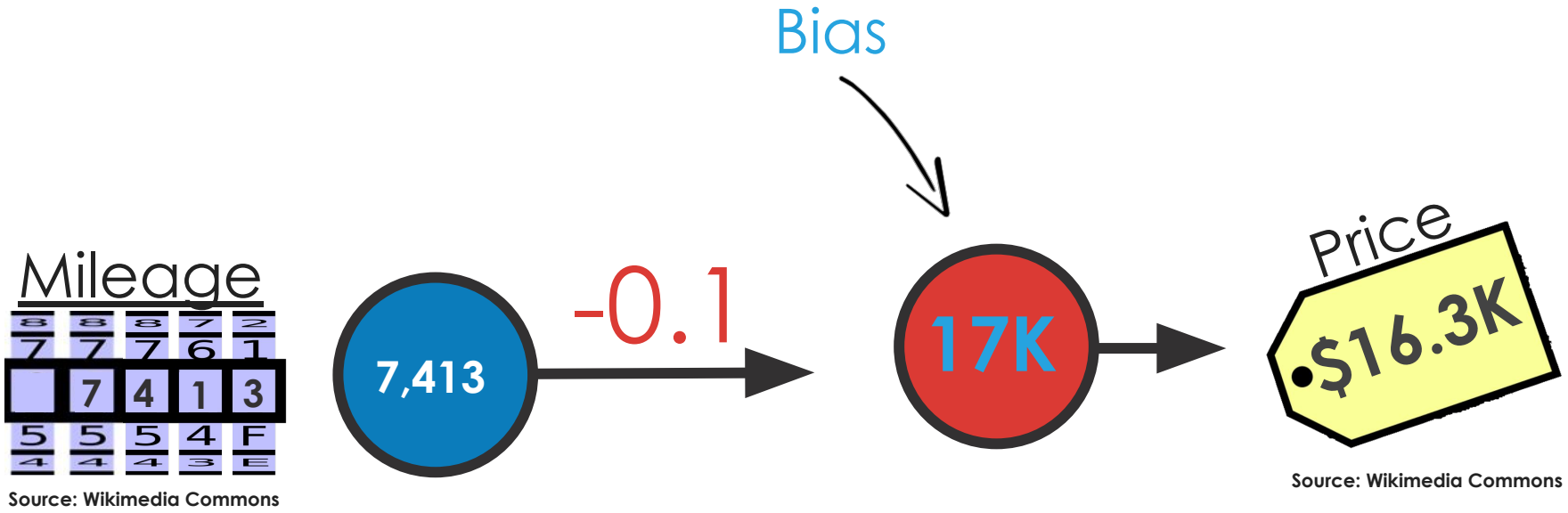
Biases



Equation

X*Weight + Bias

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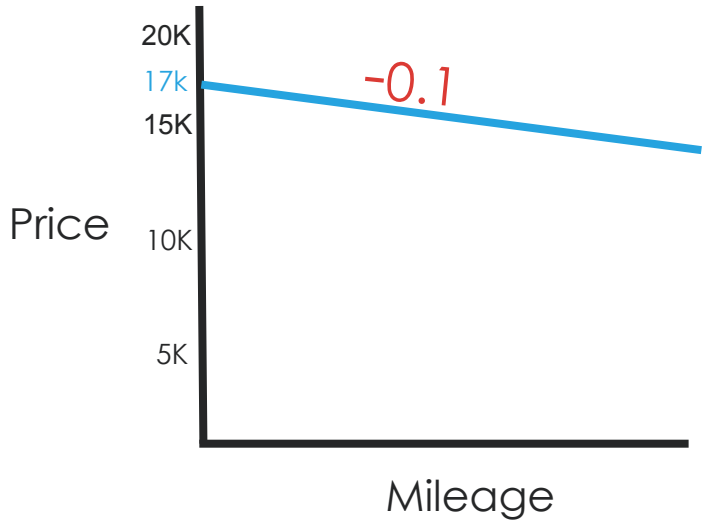
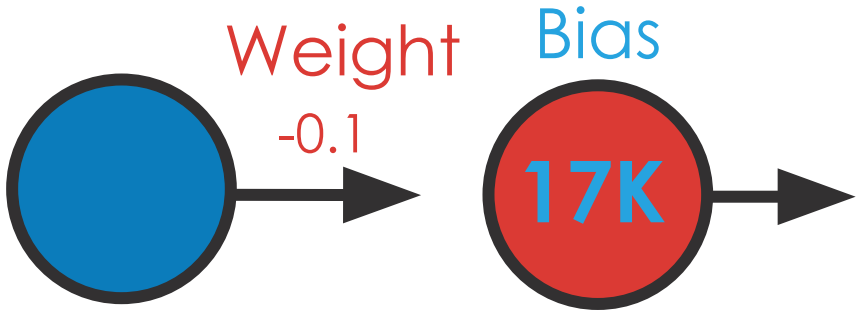
Linear Regression

$\hat{Y} = X*\text{Slope} + \text{Y-intercept}$



ANN

$\hat{Y} = X*\text{Weight} + \text{Bias}$



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Forward Propagation

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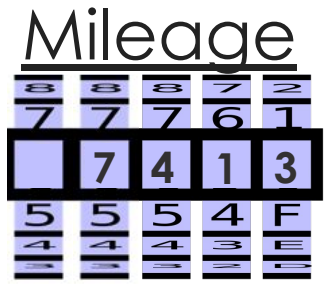
Multiple Input Neurons



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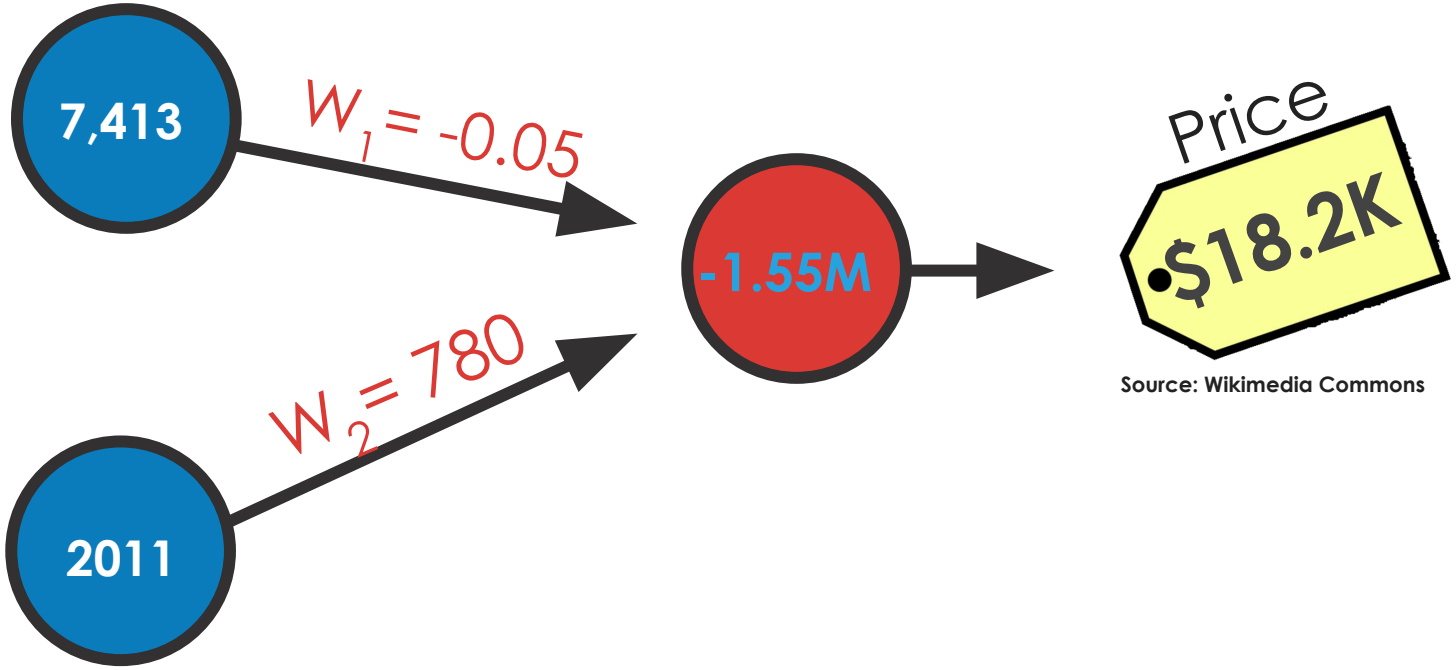

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Equation

$$X_1 * \text{Weight}_1 + X_2 * \text{Weight}_2 + \text{Bias}$$

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