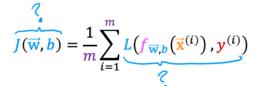
Your grade: 100%

Your latest: 100% • Your highest: 100% • To pass you need at least 80%. We keep your highest score.

Next item \rightarrow

1/1 point



- 1. In this lecture series, "cost" and "loss" have distinct meanings. Which one applies to a single training example?
 - Loss

In these lectures, loss is calculated on a single training example. It is worth noting that this definition is not universal. Other lecture series may have a different definition.

- ☐ Cost
- ☐ Both Loss and Cost
- Neither Loss nor Cost

1/1 point

Simplified loss function

$$L(f_{\overrightarrow{w},b}(\overrightarrow{\mathbf{x}}^{(i)}), \mathbf{y}^{(i)}) = \begin{cases} -\log(f_{\overrightarrow{w},b}(\overrightarrow{\mathbf{x}}^{(i)})) & \text{if } \mathbf{y}^{(i)} = 1\\ -\log(1 - f_{\overrightarrow{w},b}(\overrightarrow{\mathbf{x}}^{(i)})) & \text{if } \mathbf{y}^{(i)} = 0 \end{cases}$$

$$L(f_{\overrightarrow{w},b}(\overrightarrow{\mathbf{x}}^{(i)}), \mathbf{y}^{(i)}) = -\mathbf{y}^{(i)}\log(f_{\overrightarrow{w},b}(\overrightarrow{\mathbf{x}}^{(i)})) - (1 - \mathbf{y}^{(i)})\log(1 - f_{\overrightarrow{w},b}(\overrightarrow{\mathbf{x}}^{(i)}))$$

- 2. For the simplified loss function, if the label $y^{(i)}=0$, then what does this expression simplify to?
 - $\bigcirc \ -\log(1-f_{\vec{\mathbf{w}},b}(\mathbf{x}^{(i)})) log(1-f_{\vec{\mathbf{w}},b}(\mathbf{x}^{(i)}))$
 - $\bigcirc \log(f_{\vec{w},b}(\mathbf{x}^{(i)}))$
 - $\bigcirc \log(1 f_{\vec{\mathbf{w}},b}(\mathbf{x}^{(i)})) + log(1 f_{\vec{\mathbf{w}},b}(\mathbf{x}^{(i)}))$
 - \bigcirc $-\log(1-f_{\vec{\mathbf{w}}.b}(\mathbf{x}^{(i)}))$
 - ✓ Correct

When $y^{(i)} = 0$, the first term reduces to zero.