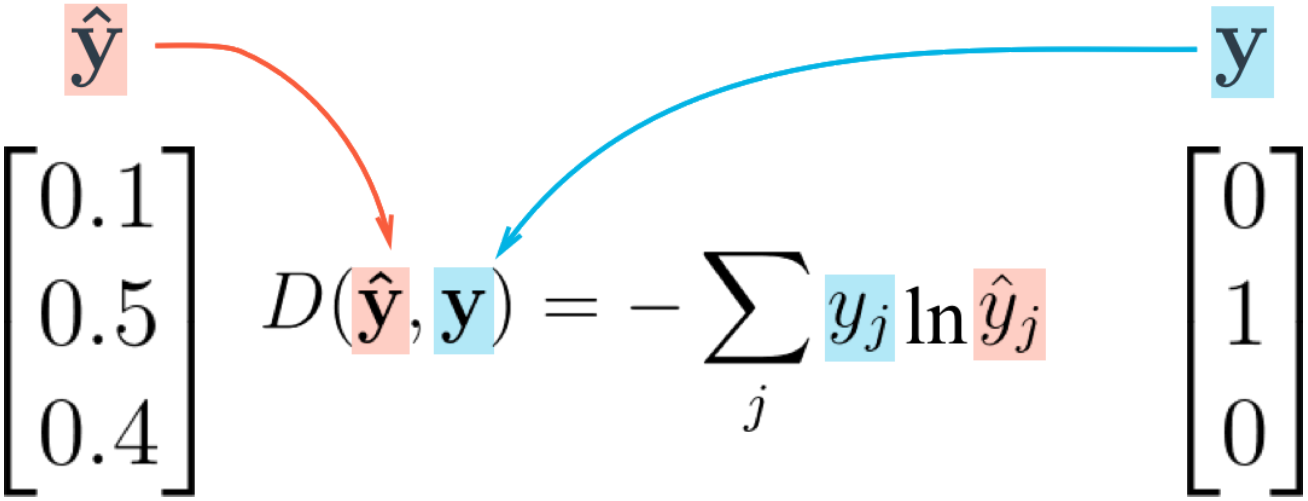
Cross Entropy in TensorFlow

As with the softmax function, TensorFlow has a function to do the cross entropy calculations for us.



Cross entropy loss function

Let's take what you learned from the video and create a cross entropy function in TensorFlow. To create a cross entropy function in TensorFlow, you'll need to use two new functions:

- `tf.reduce_sum()`
- `tf.log()`

Reduce Sum

```
x = tf.reduce_sum([1, 2, 3, 4, 5])  # 15
```

The `tf.reduce_sum()` function takes an array of numbers and sums them together.

Natural Log

```
x = tf.log(100.0)  # 4.60517
```

This function does exactly what you would expect it to do. `tf.log()` takes the natural