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## 4. Neural Network Units

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Exercises due Mar 29, 2023 08:59 -03 Completed

## Neural Network Units





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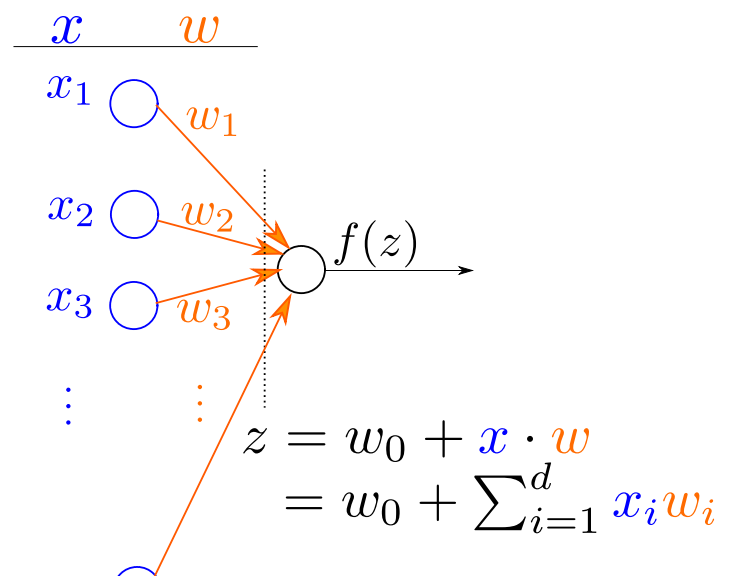
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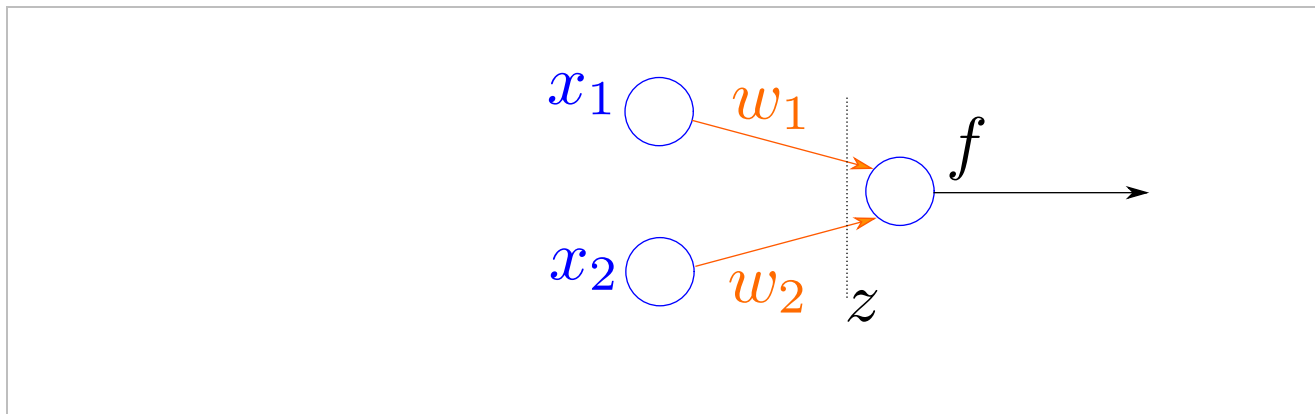
A **neural network unit** is a primitive neural network that consists of only the “input layer with only one output. It is represented pictorially as follows:



## Numerical Example - Neural Network Unit

2/2 points (graded)

In this problem, you will compute the output  $y$  in the following neural network and  $z$ .



Let

First, compute  $z$ .



The **rectified linear function (ReLU)** is defined as:

Using the ReLU function as the activation function  $f$ , compute  $y$ :



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