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| **Symbol** | **Meaning** |
| **General** | |
| m | Number of training examples |
| n | Number of features |
| i | The *ith* training example |
| h | Hypothesis |
| θ | Weights / Parameters assigned to a particular feature. Also known as the "coefficients" (i.e. numerical or constant quantity placed before and multiplying the variable in an algebraic function). |
| θ0, θ1, ... θn | Theta 0, 1 to n. |
| J | The cost |
| ∑ | Sum |
|  | Sum notation |
| α | Alpha, the learning rate |
| **Single Feature** | |
| x | Input variable / feature |
| y | Output variable / target |
| (x, y) | One training example |
| (x(i), y(i)) | The *ith* training example |
| **Multiple Feature** | |
| j | Feature j |
| x(i) | Input features of the *ith* training example |
| xj(i) | Value of feature **j** in *ith* training example |

**Linear Regression (Single + Multiple Variable)**