# A Simple Markdown Document

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## Overview

This is a simple example demonstrating the use of external figures, tables, and formulas in a Markdown document.

There are actually multiple Markdown standards in common use. In additional to the main standard, there are also extensions to the standard from from Github, Pandoc, etc. Here, we will make use of some of the extended table support in the Pandoc markdown extension.

#### Table example

Below is an example table in the Markdown pipe-style table. This is the default output from the knitr kable function.

Table 1: Subset of the Iris [1] dataset.

	Sepal.Length	Sepal.Width	Petal.Length	Petal.Width	Species
1	5.1	3.5	1.4	0.2	setosa
2	4.9	3.0	1.4	0.2	setosa
3	4.7	3.2	1.3	0.2	setosa
50	5.0	3.3	1.4	0.2	setosa
51	7.0	3.2	4.7	1.4	versicolor
52	6.4	3.2	4.5	1.5	versicolor
53	6.9	3.1	4.9	1.5	versicolor
100	5.7	2.8	4.1	1.3	versicolor
101	6.3	3.3	6.0	2.5	virginica
102	5.8	2.7	5.1	1.9	virginica
103	7.1	3.0	5.9	2.1	virginica
104	6.3	2.9	5.6	1.8	virginica

For more examples of table styles supported by Pandoc Markdown, see the Pandoc Documentation.

#### **Formulas**

Pandoc and RMarkdown (which uses Pandoc under the hood) both support arbitrary inline or block LaTeX expressions.

$$\arg\min_{\mathbf{w},\xi,b} \left\{ \frac{1}{2} \|\mathbf{w}\|^2 + C \sum_{i=1}^n \xi_i \right\}$$

Soft margin SVM objective function. (source: Wikipedia)

## Figure example

#### References

1. R. A. FISHER. "THE USE OF MULTIPLE MEASUREMENTS IN TAXONOMIC PROBLEMS". In: Annals of Eugenics 7.2 (Sep. 1936), pp. 179-188. DOI: 10.1111/j.1469-1809.1936.tb02137.x..

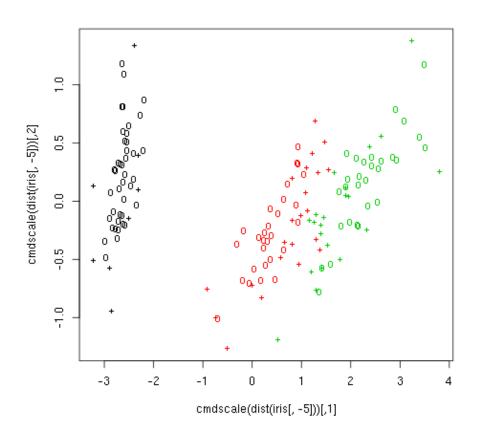


Figure 1: Figure 1: Classification of Iris datasets using SVMs  $\,$