1   Introduction

This document shows the examples from my blog post.

2   Displaying a vector

2.1   A simple vector

$$\vec{x} = \begin{pmatrix} 8 \\ 6 \\ 7 \\ 5 \\ 3 \end{pmatrix}$$

2.2   Calculating vector length

$$!|\vec{v}| = \sqrt{\sum_{i=1}^{n} v_i^2}$$

3   Displaying a matrix

3.1   Matrix of numbers

$$\begin{bmatrix} 17 & 18 & 5 & 5 & 45 & 1 \\ 42 & 28 & 30 & 15 & 115 & 3 \\ 10 & 10 & 10 & 21 & 51 & 2 \\ 28 & 5 & 65 & 39 & 132 & 5 \\ 24 & 26 & 45 & 21 & 116 & 4 \end{bmatrix}$$

3.2   Matrix with subscripts and dots

$$A = \begin{bmatrix} a_{11} & \cdots & a_{1j} & \cdots & a_{1n} \\ . & & . & & . \\ a_{i1} & \cdots & a_{ij} & \cdots & a_{in} \\ . & & . & & . \\ a_{m1} & \cdots & a_{mj} & \cdots & a_{mn} \end{bmatrix}$$