



## 1 Why

Matrices of real numbers are important.<sup>1</sup>

### Definition

A *real-valued matrix* or *matrix of real numbers* or *matrix* is a matrix in the real numbers.

### Notation

We denote the set  $n$  by  $m$  real-valued matrices by  $\mathbf{R}^{n \times m}$ .

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<sup>1</sup>Future editions will expand.



