



## Why

We want to represent elements of the set of real numbers as digital data.

## Definition

A *floating point representation* is a bit string.<sup>1</sup>

## Notation

In this context, `float32` is another name for the set of length 32 bit strings and `float64` is another name for the set of length 64 bit strings.

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



