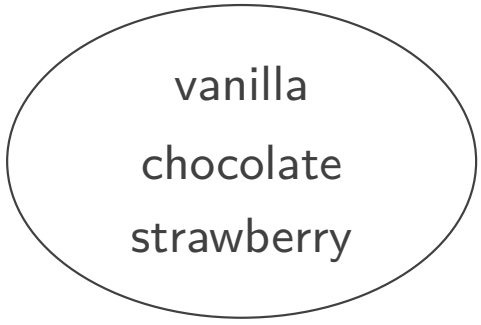
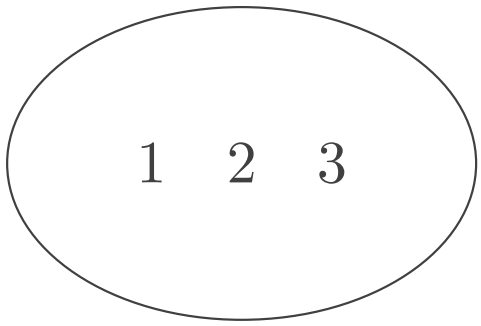
The Counting Numbers

ian.mcloughlin@gmit.ie





$\mathbb{N} = \{1, 2, 3, \ldots\}$

$1 \leftrightarrow$ vanilla

$2 \leftrightarrow$ chocolate

$3 \leftrightarrow$ strawberry

$2\mathbb{N}$

$\mathbb{N} = \{1, 2, 3, \ldots\}$

$2\mathbb{N} = \{2, 4, 6, \ldots\}$

$\mathbb{N} \leftrightarrow 2\mathbb{N}$

$1 \leftrightarrow 2$

$2 \leftrightarrow 4$

$3 \leftrightarrow 6$

$\ldots$

Computer programs are binary strings.

Treat them as integers.

They're countable.

(Slight issue with leading zeros.)