

## Set builder notation

Let  $\mathbb{Z}$  denote the integers and  $\mathbb{R}$  denote the real numbers. What are these sets?

- ▶  $A = \{f : \mathbb{Z} \rightarrow \{1, 2, 3\}\}$
- ▶  $B = \{x \subseteq \{0, 1, 2, 3\} \mid 1 \in x\}$
- ▶  $C = \{x \subseteq \mathbb{Z} \mid |x| \leq 2\}$
- ▶  $D = \{f : \mathbb{R} \rightarrow \mathbb{R} \mid \forall x (f(x) = f(0))\}$
- ▶  $E = \{x \in \mathbb{Z} \mid x > 0\}$
- ▶  $F = \{x \in \mathbb{Z} \mid x - 1 \in \mathbb{Z}\}$
- ▶  $G = \{x \in \mathbb{Z} \mid x^2 < x\}$