

Set Construction

$$\{set : range | condition \cdot operation\}$$

- In notational form (aka comprehensive specification):

$$\{Signature \mid Predicate \cdot Term\}$$

$$\{x : X \mid P(x) \cdot E(x)\}$$

Alternate even numbers:

$$\{x : \mathbb{N} \mid x \bmod 2 = 0 \cdot 2 * x\} = \{0, 4, 8, 12, 16, 20, \dots\}$$

Tens:

$$\{x : \mathbb{N} \mid x \cdot 10 * x\} = \{0, 10, 20, 30, 40, \dots\}$$