

# Some other set expressions

$$\{z \mid z \in R \wedge P\}$$

Set comprehension:

“the subset of  $R$  such that  $P$ ”

$$S \times T \text{ (ascii } S^{**}T)$$

cartesian product

$$S \times T = \{(x, y) \mid x \in S \wedge x \in T\}$$

$$\text{card}(S)$$

cardinality: the number of set elements

$$\mathbb{P}(S) \text{ (ascii POW}(S))$$

power set: the set of all subsets of  $S$

$$\mathbb{P}1(S) \text{ (ascii POW1}(S))$$

all non-empty subsets of  $S$