

# Appendix D

## Notation

- $\triangleleft$  Domain restriction (Z Notation). If  $R$  is a relation and  $S$  a set, then  $S \triangleleft R$  is the set of all tuples  $(x, y)$  that belong to  $R$  whereas  $x$  must belong to  $S$ .
- $\triangleleft\!\!\!\triangleleft$  Domain anti-restriction (Z Notation). If  $R$  is a relation and  $S$  a set, then  $S \triangleleft\!\!\!\triangleleft R$  is the set of all tuples  $(x, y)$  that belong to  $R$  whereas  $x$  must not belong to  $S$ .
- $(dom R)$  Domain of a relation or function (Z Notation).
- $\mathbb{F} S$  Set of finite subsets of set  $S$  (Z Notation).
- $\dashrightarrow$  Finite Partial function.
- $t \downarrow$  Defined (relations).  $R(\pi_1, \pi_2) \downarrow$  is true iff  $(\pi_1, \pi_2) \in R$ .
- $d \downarrow$  Defined (functions).  $F(\pi_1) \downarrow$  is true iff  $\pi_1 \in (dom F)$ .
- $t \uparrow$  Undefined (relations).  $R(\pi_1, \pi_2) \uparrow$  is true iff  $(\pi_1, \pi_2) \notin R$ .
- $d \uparrow$  Undefined (functions).  $F(\pi_1) \uparrow$  is true iff  $\pi_1 \notin (dom F)$ .

