

## fuzzy-start

### RETRIEVAL

fuzzy-set-with-label *label*

### EVALUATION

fuzzy-evaluation *x*

### PLOTTING

fuzzy-plot *set*

### DEFUZZIFICATION

fuzzy-FOM

fuzzy-LOM

fuzzy-MOM

fuzzy-MeOM

fuzzy-COG

### OPERATIONS WITH SETS

fuzzy-min (= **fuzzy-and**) *list-of-sets*

fuzzy-max (= **fuzzy-or**) *list-of-sets*

fuzzy-sum *list-of-sets*

fuzzy-prob-or *list-of-sets*

fuzzy-not *set*

fuzzy-truncate *set number*

fuzzy-prod *set number*

### HEDGES

fuzzy-power *set number*

### MEMORY

fuzzy-die

## CREATION OF FUZZY SETS FROM SCRATCH

fuzzy-discrete-numeric-set  $[[x_1 y_1] [x_2 y_2] \dots [x_n y_n]]$

fuzzy-discrete-numeric-set-with-label *label*  $[[x_1 y_1] [x_2 y_2] \dots [x_n y_n]]$

fuzzy-piecewise-linear-set  $[[x_1 y_1] [x_2 y_2] \dots [x_n y_n]]$

fuzzy-piecewise-linear-set-with-label *label*  $[[x_1 y_1] [x_2 y_2] \dots [x_n y_n]]$

fuzzy-trapezoidal-set  $[a b c d e f \text{ height}]$

fuzzy-trapezoidal-set-with-label *label*  $[a b c d e f \text{ height}]$

fuzzy-logistic-set  $[x_0 a b [\text{lower-limit upper-limit}]]$

fuzzy-logistic-set-with-label *label*  $[x_0 a b [\text{lower-limit upper-limit}]]$

fuzzy-gaussian-set  $[m s [\text{lower-limit upper-limit}]]$

fuzzy-gaussian-set-with-label *label*  $[m s [\text{lower-limit upper-limit}]]$

fuzzy-exponential-set  $[a b c [\text{lower-limit upper-limit}]]$

fuzzy-exponential-set-with-label *label*  $[a b c [\text{lower-limit upper-limit}]]$

fuzzy-interval-with-points-set  $[[[a b] v] [[x_1 y_1] [x_2 y_2] \dots [x_n y_n]]]$

fuzzy-interval-with-points-set-with-label *label*  $[[[a b] v] [[x_1 y_1] \dots [x_n y_n]]]$

## RULES

fuzzy-truncate-rule (= **fuzzy-rule**) *list-of-2-items consequent-fuzzy-set*

fuzzy-prod-rule *list-of-2-items consequent-fuzzy-set*

fuzzy-min-truncate-rule (= **fuzzy-and-rule**) *list-of-2-item-lists consequent-fuzzy-set*

fuzzy-max-truncate-rule (= **fuzzy-or-rule**) *list-of-2-item-lists consequent-fuzzy-set*

fuzzy-min-prod-rule *list-of-2-item-lists consequent-fuzzy-set*

fuzzy-max-prod-rule *list-of-2-item-lists consequent-fuzzy-set*