Phase 10 a : Relation Operators

Example 1 : Relation Type

$R\ S$

Example 2 : Maplet Constructor

$x \mapsto y$
$1 \mapsto 2$

Example 3 : Domain Restriction

$S\ R$

Example 4 : Range Restriction

$R\ T$

Example 5 : Relational Composition

$R\ S$
$R\ S$

Example 6 : Relation Functions

$\mathrm{dom}\,R$
$\mathrm{ran}\,R$

Example 7 : Complex Expressions

$\mathrm{dom}(S\ R)$
$\mathrm{ran}(R\ T)$
$A\ R\ R\ B$

Example 8 : Chained Relations

$R\ S\ T$
$A\ R\ B$

Example 9 : Relations with Set Operations

$(x \mapsto y) \in R$
$\mathrm{dom}\,R \subseteq S$
$\mathrm{ran}\,R \cup \mathrm{ran}\,S$