

Phase 11 . 8 : Relational Image

The relational image $R(_ S _)$ gives the image of set S under relation R.

Example 1 : Simple relational image

$R(S)$

Example 2 : Relational image with set literal

$R(\{1, 2, 3\})$

Example 3 : Relational image with singleton set

$parentOf(\{john\})$

Example 4 : Relational image with composition

$R \circ S(A)$

Example 5 : Relational image with inverse

$R^{-1}(S)$

Example 6 : Set comprehension with relational image (Solution 35 pattern)

$\{p : Person \mid p \in \text{dom } parentOf \bullet (p, parentOf(\{p\}))\}$

Example 7 : Chained relational images

$R(S)(T)$