2022 PREDEFINED

5.333 remainder

DESCRIPTION	LINKS
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Origin Arithmetic.

Constraint remainder(Q, D, R)

Synonyms modulo, mod.

Arguments Q : dvar

D : dvar R : dvar

Restrictions

 $\begin{aligned} \mathbf{Q} &\geq 0 \\ \mathbf{D} &> 0 \\ \mathbf{R} &\geq 0 \\ \mathbf{R} &< \mathbf{D} \end{aligned}$

Purpose Enforce R to be equal to the remainder of the division of Q by D.

Example (15, 2, 1)

The remainder constraint holds since 1 is the rest of the division of 15 by 2.

Arg. properties Functional dependency: R determined by Q and D.

Keywords constraint arguments: ternary constraint, pure functional dependency.

constraint type: predefined constraint, arithmetic constraint.

modelling: functional dependency.

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