cover[x ⨿ id[y]]

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In[1]:= SetDirectory["l:"]; << goedel.10jan29a; << tools.m

:Package Title: goedel.10jan29a 2010 January 29 at 3:05 p.m.

It is now: 2010 Jan 30 at 9:48

Loading Simplification Rules

TOOLS.M Revised 2010 January 29

weightlimit = 40

summary

The restriction of a cover relation is contained in the cover relation of a restriction.

derivation

Lemma.

In[4]:= SubstTest[dif, intersection[Di, t], 
    composite[intersection[Di, t], intersection[Di, t]], t → composite[x, id[y]]] // Reverse

Out[4]= composite[intersection[Di, x, 
    complement[composite[intersection[Di, x], id[y], intersection[Di, x]]]], 
    id[y]] := cover[composite[x, id[y]]]

In[5]:= composite[intersection[Di, x_, 
    complement[composite[intersection[Di, x_], id[y_], intersection[Di, x_]]]], 
    id[y_]] := cover[composite[x, id[y]]]

Lemma.

In[11]:= (SubstTest[subclass, intersection[t, complement[composite[t, t]]], intersection[t, 
    complement[composite[t, id[y], t]]], t → intersection[Di, x]] // Reverse) /. y → V


In[12]:= subclass[ 
    intersection[x_, composite[intersection[Di, inverse[x_]], cover[x_]]], Id] := True

Theorem.
\textbf{Theorem.} Dual result.

\textbf{Theorem.} The restriction of a cover relation is contained in the cover relation of a restriction.