#	release	delay	final	reaction	invariant	Semantics	Compare	Condition
1	rel_1	del_1	fin_1	rea_1	inv_1	**G**($trig_1$ → ((inv_1 ∧ ¬fin_1 **W** rel_1) ∨ (inv_1 **U** (fin_1 ∧ (inv_1 ∧ del_1 **U** (rel_1 ∨ rea_1))))))	inconsistent	inv_1 • inv_2 ¬(($trig_1$ ∨ $trig_2$ ∨ inv_1 ∨ inv_2) → (rel_1 ∨ fin_1∧rea_1)) ¬(($trig_1$ ∨ $trig_2$ ∨ inv_1 ∨ inv_2) → (rel_2 ∨ fin_2∧rea_2))
							inconsistent	$trig_1$ • inv_2 ¬(($trig_1$ ∨ $trig_2$ ∨ inv_1 ∨ inv_2) → (rel_2 ∨ fin_2∧rea_2))
							inconsistent	$trig_2$ • inv_1 ¬(($trig_1$ ∨ $trig_2$ ∨ inv_1 ∨ inv_2) → (rel_1 ∨ fin_1∧rea_1))
							inconsistent	rel_1 → fin_2 rel_1 • inv_2 fin_1 → fin_2 fin_1 • inv_2 ¬((rel_1 ∨ fin_1∨ fin_2) → (rel_2 ∨ fin_2∧rea_2))
							inconsistent	rel_1 → fin_2 rel_1 • inv_2 rea_1 → fin_2 rea_1 • inv_2 ¬((rel_1 ∨ rea_1∨ fin_2) → (rel_2 ∨ fin_2∧rea_2))
							consistent	inv_1 → inv_2 fin_1 → fin_2 del_1 → del_2 rea_1 → rea_2 rel_1 → rel_2
							unknown	other cases
2	***true***	del_1	fin_1	rea_1	inv_1	**TRUE**	unknown	all cases
3	***false***	del_1	fin_1	rea_1	inv_1	**G**($trig_1$ → (inv_1 **U** (fin_1 ∧ (inv_1 ∧ del_1 **U** rea_1))))	inconsistent	inv_1 • inv_2 ¬(($trig_1$ ∨ $trig_2$ ∨ inv_1 ∨ inv_2) → (fin_1 ∧ rea_1))
							inconsistent	$trig_1$ • inv_2 ¬(($trig_1$ ∨ $trig_2$ ∨ inv_1 ∨ inv_2) → (rel_2 ∨ fin_2∧rea_2))
							inconsistent	$trig_2$ • inv_1 ¬(($trig_1$ ∨ $trig_2$ ∨ inv_1 ∨ inv_2) → (fin_1 ∧ rea_1))
							Inconsistent	fin_1 → fin_2 fin_1 • inv_2
							Inconsistent	rea_1 → fin_2 rea_1 • inv_2

							consistent	$inv_1 \rightarrow inv_2$ $fin_1 \rightarrow fin_2$ $del_1 \rightarrow del_2$ $rea_1 \rightarrow rea_2$
							unknown	other cases
4							inconsistent	$inv_1 \bullet inv_2$ $\neg((trig_1 \vee trig_2 \vee inv_1 \vee inv_2) \rightarrow (fin_1 \wedge rea_1))$
							inconsistent	$trig_1 \bullet inv_2$ $\neg((trig_1 \vee trig_2 \vee inv_1 \vee inv_2) \rightarrow (rel_2 \vee fin_2 \wedge rea_2))$
	false	***true***	fin_1	rea_1	inv_1	**G**$(trig_1 \rightarrow (inv_1$ **U** $(fin_1 \wedge (inv_1$ **U** $rea_1))))$	inconsistent	$trig_2 \bullet inv_1$ $\neg((trig_1 \vee trig_2 \vee inv_1 \vee inv_2) \rightarrow (fin_1 \wedge rea_1))$
							Inconsistent	$fin_1 \rightarrow fin_2$ $fin_1 \bullet inv_2$
							Inconsistent	$rea_1 \rightarrow fin_2$ $rea_1 \bullet inv_2$
							~~consistent~~	~~$inv_1 \rightarrow inv_2$~~ ~~$fin_1 \rightarrow fin_2$~~ ~~$rea_1 \rightarrow rea_2$~~
							unknown	other cases
5							inconsistent	$inv_1 \bullet inv_2$ $\neg((trig_1 \vee trig_2 \vee inv_1 \vee inv_2) \rightarrow (fin_1 \wedge rea_1))$
							inconsistent	$trig_1 \bullet inv_2$ $\neg((trig_1 \vee trig_2 \vee inv_1 \vee inv_2) \rightarrow (rel_2 \vee (fin_2 \wedge rea_2)))$
	false	***false***	fin_1	rea_1	inv_1	**G**$(trig_1 \rightarrow (inv_1$ **U** $(fin_1 \wedge rea_1)))$	inconsistent	$trig_2 \bullet inv_1$ $\neg((trig_1 \vee trig_2 \vee inv_1 \vee inv_2) \rightarrow (fin_1 \wedge rea_1))$
							Inconsistent	$fin_1 \rightarrow fin_2$ $fin_1 \bullet inv_2$
							Inconsistent	$rea_1 \rightarrow fin_2$ $rea_1 \bullet inv_2$
							consistent	$inv_1 \rightarrow inv_2$ $fin_1 \rightarrow fin_2$ $rea_1 \rightarrow rea_2$
							unknown	other cases
6	***false***	del_1	***true***	rea_1	inv_1	**G**$(trig_1 \rightarrow (inv_1 \wedge del_1$ **U** $rea_1))$	inconsistent	$inv_1 \bullet inv_2$ $\neg((trig_1 \vee trig_2 \vee inv_1 \vee inv_2) \rightarrow rea_1)$
							inconsistent	$trig_1 \bullet inv_2$ $\neg((trig_1 \vee trig_2 \vee inv_1 \vee inv_2) \rightarrow$

								$(rel_2 \vee fin_2 \wedge rea_2))$
							inconsistent	$trig_2 \bullet inv_1$ $\neg((trig_1 \vee trig_2 \vee inv_1 \vee inv_2) \rightarrow rea_1)$
							~~Inconsistent~~	~~$fin_1 \rightarrow fin_2$~~ ~~$fin_1 \bullet inv_2$~~
							Inconsistent	$rea_1 \rightarrow fin_2$ $rea_1 \bullet inv_2$
							~~consistent~~	~~$inv_1 \rightarrow inv_2$~~ ~~$fin_1 \rightarrow fin_2$~~ ~~$del_1 \rightarrow del_2$~~ ~~$rea_1 \rightarrow rea_2$~~
							unknown	other cases
7	***false***	***true***	***true***	rea_1	inv_1	**G**$(trig_1 \rightarrow (inv_1$ **U** $rea_1))$	inconsistent	$inv_1 \bullet inv_2$ $\neg((trig_1 \vee trig_2 \vee inv_1 \vee inv_2) \rightarrow rea_1)$
							inconsistent	$trig_1 \bullet inv_2$ $\neg((trig_1 \vee trig_2 \vee inv_1 \vee inv_2) \rightarrow (rel_2 \vee fin_2 \wedge rea_2))$
							inconsistent	$trig_2 \bullet inv_1$ $\neg((trig_1 \vee trig_2 \vee inv_1 \vee inv_2) \rightarrow rea_1)$
							~~Inconsistent~~	~~$fin_1 \rightarrow fin_2$~~ ~~$fin_1 \bullet inv_2$~~
							Inconsistent	$rea_1 \rightarrow fin_2$ $rea_1 \bullet inv_2$
							~~consistent~~	~~$inv_1 \rightarrow inv_2$~~ ~~$fin_1 \rightarrow fin_2$~~ ~~$del_1 \rightarrow del_2$~~ ~~$rea_1 \rightarrow rea_2$~~
							unknown	other cases
8	***false***	***false***	***true***	rea_1	inv_1	**G**$(trig_1 \rightarrow rea_1)$	inconsistent	$inv_1 \bullet inv_2$ $\neg((trig_1 \vee trig_2 \vee inv_1 \vee inv_2) \rightarrow rea_1)$
							inconsistent	$trig_1 \bullet inv_2$ $\neg((trig_1 \vee trig_2 \vee inv_1 \vee inv_2) \rightarrow (rel_2 \vee fin_2 \wedge rea_2))$
							inconsistent	$trig_2 \bullet inv_1$ $\neg((trig_1 \vee trig_2 \vee inv_1 \vee inv_2) \rightarrow rea_1)$
							~~Inconsistent~~	~~$fin_1 \rightarrow fin_2$~~ ~~$fin_1 \bullet inv_2$~~
							Inconsistent	$rea_1 \bullet inv_2$
							~~consistent~~	~~$inv_1 \rightarrow inv_2$~~ ~~$fin_1 \rightarrow fin_2$~~ ~~$del_1 \rightarrow del_2$~~

								~~$rea_1 \rightarrow rea_2$~~
							unknown	other cases
9							inconsistent	$inv_1 \bullet inv_2$ $\neg((trig_1 \vee trig_2 \vee inv_1 \vee inv_2) \rightarrow fin_1)$
							inconsistent	$trig_1 \bullet inv_2$ $\neg((trig_1 \vee trig_2 \vee inv_1 \vee inv_2) \rightarrow (rel_2 \vee (fin_2 \wedge rea_2)))$
	false	del_1	fin_1	***true***	inv_1	**G**($trig_1 \rightarrow inv_1$ **U** fin_1)	inconsistent	$trig_2 \bullet inv_1$ $\neg((trig_1 \vee trig_2 \vee inv_1 \vee inv_2) \rightarrow fin_1)$
							Inconsistent	$fin_1 \rightarrow fin_2$ $fin_1 \bullet inv_2$
							~~consistent~~	~~$inv_1 \rightarrow inv_2$~~ ~~$fin_1 \rightarrow fin_2$~~ ~~$del_1 \rightarrow del_2$~~ ~~$rea_1 \rightarrow rea_2$~~
							unknown	other cases
10	***false***	del_1	***true***	***true***	inv_1	**TRUE**	unknown	all cases
11							inconsistent	$trig_1 \bullet inv_2$ $\neg(rel_2 \vee fin_2 \wedge rea_2)$
							Inconsistent	$fin_1 \rightarrow fin_2$ $fin_1 \bullet inv_2$
	false	del_1	fin_1	rea_1	***true***	**G**($trig_1 \rightarrow$ **F** ($fin_1 \wedge$ del_1 **U** rea_1))	Inconsistent	$rea_1 \rightarrow fin_2$ $rea_1 \bullet inv_2$
							~~consistent~~	~~$inv_1 \rightarrow inv_2$~~ ~~$fin_1 \rightarrow fin_2$~~ ~~$del_1 \rightarrow del_2$~~ ~~$rea_1 \rightarrow rea_2$~~
							unknown	other cases
12							inconsistent	$trig_1 \bullet inv_2$ $\neg(rel_2 \vee fin_2 \wedge rea_2)$
	false	***true***	fin_1	rea_1	***true***	**G**($trig_1 \rightarrow$ **F** ($fin_1 \wedge$ **F** rea_1))	Inconsistent	$fin_1 \rightarrow fin_2$ $fin_1 \bullet inv_2$
							Inconsistent	$rea_1 \rightarrow fin_2$ $rea_1 \bullet inv_2$
							unknown	other cases
13							inconsistent	$trig_1 \bullet inv_2$ $\neg(rel_2 \vee fin_2 \wedge rea_2)$
	false	***false***	fin_1	rea_1	***true***	**G**($trig_1 \rightarrow$ **F** ($fin_1 \wedge rea_1$))	Inconsistent	$fin_1 \rightarrow fin_2$ $fin_1 \bullet inv_2$
							Inconsistent	$rea_1 \rightarrow fin_2$ $rea_1 \bullet inv_2$
							unknown	other cases
14							inconsistent	$trig_1 \bullet inv_2$ $\neg(rel_2 \vee fin_2 \wedge rea_2)$
	false	del_1	***true***	rea_1	***true***	**G**($trig_1 \rightarrow$ del_1 **U** rea_1)	Inconsistent	$rea_1 \rightarrow fin_2$ $rea_1 \bullet inv_2$
							unknown	other cases

15	***false***	***true***	***true***	rea_1	***true***	**G**($trig_1$ →**F**rea_1)	inconsistent	$trig_1$ • inv_2 ¬(rel_2 ∨ fin_2∧rea_2)
							Inconsistent	rea_1 → fin_2 rea_1 • inv_2
							unknown	other cases
16	***false***	***false***	***true***	rea_1	***true***	**G**($trig_1$ →rea_1)	inconsistent	$trig_1$ • inv_2 ¬(rel_2 ∨ fin_2∧rea_2)
							Inconsistent	rea_1 • inv_2
							unknown	other cases
17	***false***	del_1 ***true*** ***false***	fin_1	***true***	***true***	**G**($trig_1$ → **F** fin_1)	inconsistent	$trig_1$ • inv_2 ¬(rel_2 ∨ fin_2∧rea_2))
							Inconsistent	fin_1 → fin_2 fin_1 • inv_2
							unknown	other cases
18	***false***	any	***true***	***true***	***true***	**TRUE**	unknown	all cases
19	***false***	any	***false***	***true***	***true***	**FALSE**	inconsistent	all cases
20	***false***	any	any	any	***false***	**FALSE**	inconsistent	all cases
21	rel_1	any	***false***	any	inv_1	**G**($trig_1$ → inv_1 **W** rel_1)	inconsistent	inv_1 • inv_2 ¬(($trig_1$ ∨ $trig_2$ ∨ inv_1 ∨ inv_2) → rel_1) ¬(($trig_1$ ∨ $trig_2$ ∨ inv_1 ∨ inv_2) → (rel_2 ∨ fin_2∧rea_2))
							inconsistent	$trig_1$ • inv_2 ¬(($trig_1$ ∨ $trig_2$ ∨ inv_1 ∨ inv_2) → (rel_2 ∨ fin_2∧rea_2))
							inconsistent	$trig_2$ • inv_1 ¬(($trig_1$ ∨ $trig_2$ ∨ inv_1 ∨ inv_2) → rel_1)
							inconsistent	rel_1 → fin_2 rel_1 • inv_2
							unknown	other cases
22	***true***	any	***false***	any	any	**TRUE**	unknown	all cases
23	***false***	any	***false***	any	inv_1	**G**($trig_1$ → inv_1)	inconsistent	inv_1 • inv_2 ¬(($trig_1$ ∨ $trig_2$ ∨ inv_1 ∨ inv_2) → (rel_2 ∨ fin_2∧rea_2))
							inconsistent	$trig_1$ • inv_2 ¬(($trig_1$ ∨ $trig_2$ ∨ inv_1 ∨ inv_2) → (rel_2 ∨ fin_2∧rea_2))
							inconsistent	$trig_2$ • inv_1
							unknown	other cases
24	***false***	any	***false***	any	***true***	**TRUE**	unknown	all cases
25	***false***	any	***false***	any	***false***	**FALSE**	inconsistent	all cases
26	rel_1	any	***false***	any	***true***	**G**($trig_1$ →	unknown	all cases

						true **W** rel_1) = **TRUE**		
27	rel_1	any	***false***	any	***false***	**G**($trig_1$ → ***false*** **W** rel_1) = **FALSE**	inconsistent	all cases
28	rel_1	del_1	***true***	rea_1	inv_1	**G**($trig_1$ → ((inv_1 ∧ del_1) **U** (rel_1 ∨ rea_1)))	inconsistent	inv_1 •∘ inv_2 ¬(($trig_1$ ∨ $trig_2$ ∨ inv_1 ∨ inv_2) → (rel_1 ∨ rea_1)) ¬(($trig_1$ ∨ $trig_2$ ∨ inv_1 ∨ inv_2) → (rel_2 ∨ fin_2∧rea_2))
							inconsistent	$trig_1$ • inv_2 ¬(($trig_1$ ∨ $trig_2$ ∨ inv_1 ∨ inv_2) → (rel_2 ∨ fin_2∧rea_2))
							inconsistent	$trig_2$ • inv_1 ¬(($trig_1$ ∨ $trig_2$ ∨ inv_1 ∨ inv_2) → (rel_1 ∨ rea_1))
							inconsistent	rel_1 → fin_2 rel_1 • inv_2 ¬(fin_2 → (rel_2 ∨ rea_2))
							inconsistent	rea_1 → fin_2 rea_1 • inv_2 ¬(fin_2 → (rel_2 ∨ rea_2))
							unknown	other cases
29	rel_1	***true***	***true***	rea_1	inv_1	**G**($trig_1$ → (inv_1 **U** (rel_1 ∨ rea_1)))	inconsistent	inv_1 • inv_2 ¬(($trig_1$ ∨ $trig_2$ ∨ inv_1 ∨ inv_2) → (rel_1 ∨ rea_1)) ¬(($trig_1$ ∨ $trig_2$ ∨ inv_1 ∨ inv_2) → (rel_2 ∨ fin_2∧rea_2))
							inconsistent	$trig_1$ • inv_2 ¬(($trig_1$ ∨ $trig_2$ ∨ inv_1 ∨ inv_2) → (rel_2 ∨ fin_2∧rea_2))
							inconsistent	$trig_2$ • inv_1 ¬(($trig_1$ ∨ $trig_2$ ∨ inv_1 ∨ inv_2) → (rel_1 ∨ rea_1))
							inconsistent	rel_1 → fin_2 rel_1 • inv_2 ¬(fin_2 → (rel_2 ∨ rea_2))
							inconsistent	rea_1 → fin_2 rea_1 • inv_2 ¬(fin_2 → (rel_2 ∨ rea_2))
							unknown	other cases

30	rel_1	***false***	***true***	rea_1	any	**G**($trig_1$ → (rel_1 ∨ rea_1))	inconsistent	$trig_1$ • inv_2 ¬(($trig_1$ ∨ $trig_2$ ∨ inv_2) → (rel_2 ∨ fin_2∧rea_2))
							inconsistent	rel_1 • inv_2
							inconsistent	rea_1 • inv_2
							unknown	other cases
31	any	any	***true***	***true***	any	**G**($trig_1$ → ((inv_1 ∧ del_1) **U** (rel_1 ∨ ***true***))) = **TRUE**	unknown	all cases
32	rel_1	del_1	***true***	***false***	inv_1	**G**($trig_1$ → ((inv_1 ∧ del_1) **U** rel_1))	inconsistent	inv_1 • inv_2 ¬(($trig_1$ ∨ $trig_2$ ∨ inv_1 ∨ inv_2) → rel_1) ¬(($trig_1$ ∨ $trig_2$ ∨ inv_1 ∨ inv_2) → (rel_2 ∨ fin_2∧rea_2))
							inconsistent	$trig_1$ • inv_2 ¬(($trig_1$ ∨ $trig_2$ ∨ inv_1 ∨ inv_2) → (rel_2 ∨ fin_2∧rea_2))
							inconsistent	$trig_2$ • inv_1 ¬(($trig_1$ ∨ $trig_2$ ∨ inv_1 ∨ inv_2) → rel_1)
							inconsistent	rel_1 → fin_2 rel_1 • inv_2 ¬(fin_2 → (rel_2 ∨ rea_2))
							unknown	other cases
33	rel_1	***false***	***true***	***false***	any	**G**($trig_1$ → ((inv_1 ∧ ***false***) **U** rel_1)) = **FALSE**	inconsistent	all cases
34	rel_1	***true***	***true***	***false***	inv_1	**G**($trig_1$ → (inv_1 **U** rel_1))	inconsistent	inv_1 • inv_2 ¬(($trig_1$ ∨ $trig_2$ ∨ inv_1 ∨ inv_2) → rel_1) ¬(($trig_1$ ∨ $trig_2$ ∨ inv_1 ∨ inv_2) → (rel_2 ∨ fin_2∧rea_2))
							inconsistent	$trig_1$ • inv_2 ¬(($trig_1$ ∨ $trig_2$ ∨ inv_1 ∨ inv_2) → (rel_2 ∨ fin_2∧rea_2))
							inconsistent	$trig_2$ • inv_1 ¬(($trig_1$ ∨ $trig_2$ ∨ inv_1 ∨ inv_2) → rel_1)
							inconsistent	rel_1 → fin_2 rel_1 • inv_2 ¬(fin_2 → (rel_2 ∨ rea_2))

							unknown	other cases
35	rel_1	any	***true***	any	***false***	**G**($trig_1$ → ((***false*** ∧ del_1) **U** (rel_1 ∨ rea_1))) = **FALSE**	inconsistent	all cases
36	rel_1	del_1	***true***	rea_1	***true***	**G**($trig_1$ → (del_1 **U** (rel_1 ∨ rea_1)))	inconsistent	$trig_1$ • inv_2 ¬(rel_2 ∨ fin_2∧rea_2)
							inconsistent	rel_1 → fin_2 rel_1 • inv_2 ¬(fin_2 → (rel_2 ∨ rea_2))
							inconsistent	rea_1 → fin_2 rea_1 • inv_2 ¬(fin_2 → (rel_2 ∨ rea_2))
							unknown	other cases
37	rel_1	***true***	***true***	rea_1	***true***	**G**($trig_1$ → **F** (rel_1 ∨ rea_1))	inconsistent	$trig_1$ • inv_2 ¬(rel_2 ∨ fin_2∧rea_2)
							inconsistent	rel_1 → fin_2 rel_1 • inv_2 ¬(fin_2 → (rel_2 ∨ rea_2))
							inconsistent	rea_1 → fin_2 rea_1 • inv_2 ¬(fin_2 → (rel_2 ∨ rea_2))
							unknown	other cases
38	rel_1	***false***	***true***	rea_1	***true***	**G**($trig_1$ → rel_1 ∨ rea_1)	inconsistent	$trig_1$ • inv_2 ¬(rel_2 ∨ fin_2∧rea_2)
							inconsistent	rel_1 • inv_2
							inconsistent	rea_1 • inv_2
							unknown	other cases
39	rel_1	any	***true***	***true***	***true***	**G**($trig_1$ → (del_1 **U** rel_1 ∨ ***true***)) = **TRUE**	unknown	all cases
40	rel_1	del_1	***true***	***false***	***true***	**G**($trig_1$ → (del_1 **U** rel_1)	inconsistent	$trig_1$ • inv_2 ¬(rel_2 ∨ fin_2∧rea_2)
							inconsistent	rel_1 → fin_2 rel_1 • inv_2 ¬(fin_2 → (rel_2 ∨ rea_2))
							unknown	other cases
41	rel_1	***true***	***true***	***false***	***true***	**G**($trig_1$ → **F** rel_1)	inconsistent	$trig_1$ • inv_2 ¬(rel_2 ∨ fin_2∧rea_2)
							inconsistent	rel_1 → fin_2 rel_1 • inv_2 ¬(fin_2 → (rel_2 ∨ rea_2))
							unknown	other cases
42	rel_1	***false***	***true***	***false***	***true***	**G**($trig_1$ → rel_1)	inconsistent	$trig_1$ • inv_2 ¬(rel_2 ∨ fin_2∧rea_2)
							inconsistent	rel_1 • inv_2
							unknown	other cases

48							inconsistent	$inv_1 \bullet inv_2$ $\neg((trig_1 \vee trig_2 \vee inv_1 \vee inv_2) \rightarrow (rel_1 \vee fin_1 \wedge rea_1))$ $\neg((trig_1 \vee trig_2 \vee inv_1 \vee inv_2) \rightarrow (rel_2 \vee fin_2 \wedge rea_2))$
							inconsistent	$trig_1 \bullet inv_2$ $\neg((trig_1 \vee trig_2 \vee inv_1 \vee inv_2) \rightarrow (rel_2 \vee fin_2 \wedge rea_2))$
							inconsistent	$trig_2 \bullet inv_1$ $\neg((trig_1 \vee trig_2 \vee inv_1 \vee inv_2) \rightarrow (rel_1 \vee fin_1 \wedge rea_1))$
	$\underline{rel_1}$	***true***	$\underline{fin_1}$	rea_1	inv_1	$\mathbf{G}(trig_1 \rightarrow ((inv_1 \wedge \neg fin_1 \mathbf{W} rel_1) \vee (inv_1 \mathbf{U} (fin_1 \wedge (inv_1 \mathbf{U} (rel_1 \vee rea_1))))))$	inconsistent	$rel_1 \rightarrow fin_2$ $rel_1 \bullet inv_2$ $fin_1 \rightarrow fin_2$ $fin_1 \bullet inv_2$ $\neg((rel_1 \vee fin_1 \vee fin_2) \rightarrow (rel_2 \vee fin_2 \wedge rea_2))$
							inconsistent	$rel_1 \rightarrow fin_2$ $rel_1 \bullet inv_2$ $rea_1 \rightarrow fin_2$ $rea_1 \bullet inv_2$ $\neg((rel_1 \vee rea_1 \vee fin_2) \rightarrow (rel_2 \vee fin_2 \wedge rea_2))$
							~~consistent~~	~~$inv_1 \rightarrow inv_2$~~ ~~$fin_1 \rightarrow fin_2$~~ ~~$del_1 \rightarrow del_2$~~ ~~$rea_1 \rightarrow rea_2$~~ ~~$rel_1 \rightarrow rel_2$~~
							unknown	other cases
49	$\underline{rel_1}$	***true***	$\underline{fin_1}$	rea_1	***true***	$\mathbf{G}(trig_1 \rightarrow ((\neg fin_1 \mathbf{W} rel_1) \vee \mathbf{F}(fin_1 \wedge \mathbf{F}(rel_1 \vee rea_1))))$	inconsistent	$trig_1 \bullet inv_2$ $\neg(rel_2 \vee fin_2 \wedge rea_2)$
							inconsistent	$rel_1 \rightarrow fin_2$ $rel_1 \bullet inv_2$ $fin_1 \rightarrow fin_2$ $fin_1 \bullet inv_2$ $\neg((rel_1 \vee fin_1 \vee fin_2) \rightarrow (rel_2 \vee fin_2 \wedge rea_2))$
							inconsistent	$rel_1 \rightarrow fin_2$ $rel_1 \bullet inv_2$ $rea_1 \rightarrow fin_2$ $rea_1 \bullet inv_2$ $\neg((rel_1 \vee rea_1 \vee fin_2) \rightarrow (rel_2 \vee fin_2 \wedge rea_2))$

							unknown	other cases
50	$\underline{rel_1}$	***true***	$\underline{fin_1}$	rea_1	***false***	**G**($trig_1 \rightarrow (rel_1 \vee (fin_1 \wedge rea_1))$)	inconsistent	$trig_1 \bullet inv_2$ $\neg((trig_1 \vee trig_2 \vee inv_2) \rightarrow (rel_2 \vee fin_2 \wedge rea_2))$
							inconsistent	$rel_1 \rightarrow fin_2$ $rel_1 \bullet inv_2$ $fin_1 \rightarrow fin_2$ $fin_1 \bullet inv_2$ $\neg((rel_1 \vee fin_1 \vee fin_2) \rightarrow (rel_2 \vee fin_2 \wedge rea_2))$
							inconsistent	$rel_1 \rightarrow fin_2$ $rel_1 \bullet inv_2$ $rea_1 \rightarrow fin_2$ $rea_1 \bullet inv_2$ $\neg((rel_1 \vee rea_1 \vee fin_2) \rightarrow (rel_2 \vee fin_2 \wedge rea_2))$
							unknown	other cases
51	$\underline{rel_1}$	***true***	$\underline{fin_1}$	***true***	inv_1	**G**($trig_1 \rightarrow ((inv_1 \wedge \neg fin_1 \mathbf{W} rel_1) \vee (inv_1 \mathbf{U} fin_1))$)	inconsistent	$inv_1 \bullet inv_2$ $\neg((trig_1 \vee trig_2 \vee inv_1 \vee inv_2) \rightarrow (rel_1 \vee fin_1))$ $\neg((trig_1 \vee trig_2 \vee inv_1 \vee inv_2) \rightarrow (rel_2 \vee fin_2 \wedge rea_2))$
							inconsistent	$trig_1 \bullet inv_2$ $\neg((trig_1 \vee trig_2 \vee inv_1 \vee inv_2) \rightarrow (rel_2 \vee fin_2 \wedge rea_2))$
							inconsistent	$trig_2 \bullet inv_1$ $\neg((trig_1 \vee trig_2 \vee inv_1 \vee inv_2) \rightarrow (rel_1 \vee fin_1))$
							inconsistent	$rel_1 \rightarrow fin_2$ $rel_1 \bullet inv_2$ $fin_1 \rightarrow fin_2$ $fin_1 \bullet inv_2$ $\neg((rel_1 \vee fin_1 \vee fin_2) \rightarrow (rel_2 \vee fin_2 \wedge rea_2))$
							unknown	other cases
52	$\underline{rel_1}$	***true***	$\underline{fin_1}$	***true***	***true***	**G**($trig_1 \rightarrow (\neg fin_1 \mathbf{W} rel_1) \vee \mathbf{F}\ fin_1)$)	inconsistent	$trig_1 \bullet inv_2$ $\neg(rel_2 \vee fin_2 \wedge rea_2)$
							inconsistent	$rel_1 \rightarrow fin_2$ $rel_1 \bullet inv_2$ $fin_1 \rightarrow fin_2$ $fin_1 \bullet inv_2$ $\neg((rel_1 \vee fin_1 \vee fin_2) \rightarrow (rel_2 \vee fin_2 \wedge rea_2))$
							unknown	other cases

53	$\underline{rel_1}$	***true***	$\underline{fin_1}$	***true***	***false***	**G**($trig_1$ → (rel_1 ∨ fin_1))	inconsistent	$trig_1$ • inv_2 ¬(($trig_1$ ∨ $trig_2$ ∨ inv_2) → (rel_2 ∨ fin_2∧rea_2))
							inconsistent	rel_1 → fin_2 rel_1 • inv_2 fin_1 → fin_2 fin_1 • inv_2 ¬((rel_1 ∨ fin_1∨ fin_2) → (rel_2 ∨ fin_2∧rea_2))
							unknown	other cases
54	$\underline{rel_1}$	***true***	$\underline{fin_1}$	***false***	inv_1	**G**($trig_1$ → (inv_1 ∧ ¬fin_1 **W** rel_1))	inconsistent	inv_1 • inv_2 ¬(($trig_1$ ∨ $trig_2$ ∨ inv_1 ∨ inv_2) →rel_1) ¬(($trig_1$ ∨ $trig_2$ ∨ inv_1 ∨ inv_2) → (rel_2 ∨ fin_2∧rea_2))
							inconsistent	$trig_1$ • inv_2 ¬(($trig_1$ ∨ $trig_2$ ∨ inv_1 ∨ inv_2) → (rel_2 ∨ fin_2∧rea_2))
							inconsistent	$trig_2$ • inv_1 ¬(($trig_1$ ∨ $trig_2$ ∨ inv_1 ∨ inv_2) →rel_1)
							inconsistent	rel_1 → fin_2 rel_1 • inv_2 fin_1 → fin_2 fin_1 • inv_2 ¬((rel_1 ∨ fin_1∨fin_2) → (rel_2 ∨ fin_2∧rea_2))
							unknown	other cases
55	$\underline{rel_1}$	***true***	$\underline{fin_1}$	***false***	***false***	**G**($trig_1$ → rel_1)	inconsistent	$trig_1$ • inv_2 ¬(($trig_1$ ∨ $trig_2$ ∨ inv_2) → (rel_2 ∨ fin_2∧rea_2))
							inconsistent	rel_1 • inv_2 ¬(($trig_1$ ∨ $trig_2$ ∨ rel_1 ∨ inv_2) → (rel_2 ∨ fin_2∧rea_2))
							unknown	other cases
56	$\underline{rel_1}$	***true***	$\underline{fin_1}$	***false***	***true***	**G**($trig_1$ → (¬fin_1 **W** rel_1))	inconsistent	$trig_1$ • inv_2 ¬(rel_2 ∨ fin_2∧rea_2)
							inconsistent	rel_1 → fin_2 rel_1 • inv_2 fin_1 → fin_2 fin_1 • inv_2 ¬((rel_1 ∨ fin_1∨fin_2) → (rel_2 ∨ fin_2∧rea_2))
							unknown	other cases
57	$\underline{rel_1}$	***false***	$\underline{fin_1}$	rea_1	inv_1		inconsistent	inv_1 • inv_2

						G($trig_1$ → ((inv_1 ∧ ¬fin_1 **W** rel_1) ∨ (inv_1 **U**(fin_1 ∧ (rel_1∨rea_1)))))		¬(($trig_1$ ∨ $trig_2$ ∨ inv_1 ∨ inv_2) → (rel_1 ∨ fin_1∧rea_1)) ¬(($trig_1$ ∨ $trig_2$ ∨ inv_1 ∨ inv_2) → (rel_2 ∨ fin_2∧rea_2))
							inconsistent	$trig_1$ • inv_2 ¬(($trig_1$ ∨ $trig_2$ ∨ inv_1 ∨ inv_2) → (rel_2 ∨ fin_2∧rea_2))
							inconsistent	$trig_2$ • inv_1 ¬(($trig_1$ ∨ $trig_2$ ∨ inv_1 ∨ inv_2) → (rel_1 ∨ fin_1∧rea_1))
							inconsistent	rel_1 → fin_2 rel_1 • inv_2 fin_1 → fin_2 fin_1 • inv_2 ¬((rel_1 ∨ fin_1∨ fin_2) → (rel_2 ∨ fin_2∧rea_2))
							inconsistent	rel_1 → fin_2 rel_1 • inv_2 rea_1 → fin_2 rea_1 • inv_2 ¬((rel_1 ∨ rea_1∨ fin_2) → (rel_2 ∨ fin_2∧rea_2))
							unknown	other cases
58						**G**($trig_1$ → (¬fin_1 **W** rel_1) ∨ **F**(fin_1 ∧ (rel_1∨rea_1)))	inconsistent	$trig_1$ • inv_2 ¬(rel_2 ∨ fin_2∧rea_2)
	<u>rel_1</u>	***false***	<u>fin_1</u>	rea_1	***true***		inconsistent	rel_1 → fin_2 rel_1 • inv_2 fin_1 → fin_2 fin_1 • inv_2 ¬((rel_1 ∨ fin_1∨ fin_2) → (rel_2 ∨ fin_2∧rea_2))
							inconsistent	rel_1 → fin_2 rel_1 • inv_2 rea_1 → fin_2 rea_1 • inv_2 ¬((rel_1 ∨ rea_1∨ fin_2) → (rel_2 ∨ fin_2∧rea_2))
							unknown	other cases
59	<u>rel_1</u>	***false***	<u>fin_1</u>	rea_1	***false***	**G**($trig_1$ → (rel_1∨ (fin_1 ∧ rea_1)))	inconsistent	$trig_1$ • inv_2 ¬(($trig_1$ ∨ $trig_2$ ∨ inv_2) → (rel_2 ∨ fin_2∧rea_2))
							inconsistent	rel_1 → fin_2 rel_1 • inv_2 fin_1 → fin_2

								fin_1 • inv_2 ¬((rel_1 ∨ fin_1∨ fin_2) → (rel_2 ∨ fin_2∧rea_2))
							inconsistent	rel_1 → fin_2 rel_1 • inv_2 rea_1 → fin_2 rea_1 • inv_2 ¬((rel_1 ∨ rea_1∨ fin_2) → (rel_2 ∨ fin_2∧rea_2))
							unknown	other cases
60	$\underline{rel_1}$	***false***	$\underline{fin_1}$	***true***	any	**TRUE**	unknown	all cases
61	$\underline{rel_1}$	***false***	$\underline{fin_1}$	***false***	inv_1	**G**($trig_1$ → ((inv_1 ∧ ¬fin_1 **W**rel_1) ∨ (inv_1**U**(fin_1 ∧ rel_1))))	inconsistent	inv_1 • inv_2 ¬(($trig_1$ ∨ $trig_2$ ∨ inv_1 ∨ inv_2) →rel_1) ¬(($trig_1$ ∨ $trig_2$ ∨ inv_1 ∨ inv_2) → (rel_2 ∨ fin_2∧rea_2))
							inconsistent	$trig_1$ • inv_2 ¬(($trig_1$ ∨ $trig_2$ ∨ inv_1 ∨ inv_2) → (rel_2 ∨ fin_2∧rea_2))
							inconsistent	$trig_2$ • inv_1 ¬(($trig_1$ ∨ $trig_2$ ∨ inv_1 ∨ inv_2) →rel_1)
							inconsistent	rel_1 → fin_2 rel_1 • inv_2 fin_1 → fin_2 fin_1 • inv_2 ¬((rel_1 ∨ fin_1∨ fin_2) → (rel_2 ∨ fin_2∧rea_2))
							unknown	other cases
62	$\underline{rel_1}$	$\underline{del_1}$	$\underline{fin_1}$	rea_1	***true***	**G**($trig_1$ → (¬fin_1 **W**rel_1) ∨ (**F**(fin_1 ∧ (del_1 **U**(rel_1∨rea_1))))))	inconsistent	$trig_1$ • inv_2 ¬(rel_2 ∨ fin_2∧rea_2)
							inconsistent	rel_1 → fin_2 rel_1 • inv_2 fin_1 → fin_2 fin_1 • inv_2 ¬((rel_1 ∨ fin_1∨ fin_2) → (rel_2 ∨ fin_2∧rea_2))
							inconsistent	rel_1 → fin_2 rel_1 • inv_2 rea_1 → fin_2 rea_1 • inv_2 ¬((rel_1 ∨ rea_1∨ fin_2) → (rel_2 ∨ fin_2∧rea_2))
							unknown	other cases

63	$\underline{rel_1}$	$\underline{del_1}$	$\underline{fin_1}$	rea_1	***false***	**G**($trig_1 \rightarrow$ ($rel_1 \vee fin_1 \wedge rea_1$))	inconsistent	$trig_1 \bullet inv_2$ $\neg((trig_1 \vee trig_2 \vee inv_2) \rightarrow (rel_2 \vee fin_2 \wedge rea_2))$
							inconsistent	$rel_1 \rightarrow fin_2$ $rel_1 \bullet inv_2$ $fin_1 \rightarrow fin_2$ $fin_1 \bullet inv_2$ $\neg((rel_1 \vee fin_1 \vee fin_2) \rightarrow (rel_2 \vee fin_2 \wedge rea_2))$
							inconsistent	$rel_1 \rightarrow fin_2$ $rel_1 \bullet inv_2$ $rea_1 \rightarrow fin_2$ $rea_1 \bullet inv_2$ $\neg((rel_1 \vee rea_1 \vee fin_2) \rightarrow (rel_2 \vee fin_2 \wedge rea_2))$
							unknown	other cases
64	$\underline{rel_1}$	$\underline{del_1}$	$\underline{fin_1}$	***true***	any	**TRUE**	unknown	all cases
65	rel_1	del_1	fin_1	***false***	inv_1	**G**($trig_1 \rightarrow (inv_1 \wedge \neg fin_1$ **W** $rel_1)$)	inconsistent	$inv_1 \bullet inv_2$ $\neg((trig_1 \vee trig_2 \vee inv_1 \vee inv_2) \rightarrow rel_1)$ $\neg((trig_1 \vee trig_2 \vee inv_1 \vee inv_2) \rightarrow (rel_2 \vee fin_2 \wedge rea_2))$
							inconsistent	$trig_1 \bullet inv_2$ $\neg((trig_1 \vee trig_2 \vee inv_1 \vee inv_2) \rightarrow (rel_2 \vee fin_2 \wedge rea_2))$
							inconsistent	$trig_2 \bullet inv_1$ $\neg((trig_1 \vee trig_2 \vee inv_1 \vee inv_2) \rightarrow rel_1)$
							inconsistent	$rel_1 \rightarrow fin_2$ $rel_1 \bullet inv_2$ $fin_1 \rightarrow fin_2$ $fin_1 \bullet inv_2$ $\neg((rel_1 \vee fin_1 \vee fin_2) \rightarrow (rel_2 \vee fin_2 \wedge rea_2))$
							unknown	other cases
66	$\underline{rel_1}$	del_1	$\underline{fin_1}$	***false***	***false***	**G**($trig_1 \rightarrow rel_1$)	inconsistent	$trig_1 \bullet inv_2$ $\neg((trig_1 \vee trig_2 \vee inv_2) \rightarrow (rel_2 \vee fin_2 \wedge rea_2))$
							inconsistent	$rel_1 \bullet inv_2$ $\neg((trig_1 \vee trig_2 \vee rel_1 \vee inv_2) \rightarrow (rel_2 \vee fin_2 \wedge rea_2))$
							unknown	other cases
67	$\underline{rel_1}$	del_1	$\underline{fin_1}$	***false***	***true***	**G**($trig_1 \rightarrow$ ($\neg fin_1$ **W** rel_1))	inconsistent	$trig_1 \bullet inv_2$ $\neg(rel_2 \vee fin_2 \wedge rea_2)$
							inconsistent	$rel_1 \rightarrow fin_2$

								$rel_1 \bullet inv_2$ $fin_1 \rightarrow fin_2$ $fin_1 \bullet inv_2$ $\neg((rel_1 \vee fin_1 \vee fin_2) \rightarrow (rel_2 \vee fin_2 \wedge rea_2))$
							unknown	other cases