|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **#** | **release** | **delay** | **final** | **reaction** | **invariant** | **Semantics** | **Compare** | **Condition** |
| 1 | rel1 | del1 | fin1 | rea1 | inv1 | **G**(trig1 → ((inv1 ∧ ¬fin1 **W**rel1) ∨  (inv1**U**(fin1 ∧ (inv1 ∧ del1 **U**(rel1∨rea1)))))) | inconsistent | inv1 • inv2  ¬((trig1 ∨ trig2 ∨ inv1 ∨ inv2) →  (rel1 ∨ fin1∧rea1))  ¬((trig1 ∨ trig2 ∨ inv1 ∨ inv2) →  (rel2 ∨ fin2∧rea2)) |
|  | inconsistent | trig1 • inv2  ¬((trig1 ∨ trig2 ∨ inv1 ∨ inv2) →  (rel2 ∨ fin2∧rea2)) |
|  | inconsistent | trig2 • inv1  ¬((trig1 ∨ trig2 ∨ inv1 ∨ inv2) →  (rel1 ∨ fin1∧rea1)) |
|  | inconsistent | rel1 → fin2  rel1 • inv2  fin1 → fin2  fin1 • inv2  ¬((rel1 ∨ fin1∨ fin2) →  (rel2 ∨ fin2∧rea2)) |
|  | inconsistent | rel1 → fin2  rel1 • inv2  rea1 → fin2  rea1 • inv2  ¬((rel1 ∨ rea1∨ fin2) →  (rel2 ∨ fin2∧rea2)) |
|  | consistent | inv1 → inv2  fin1 → fin2  del1 → del2  rea1 → rea2  rel1 → rel2 |
|  | unknown | other cases |
| 2 | ***true*** | del1 | fin1 | rea1 | inv1 | **TRUE** | unknown | all cases |
| 3 | ***false*** | del1 | fin1 | rea1 | inv1 | **G**(trig1 →  (inv1 **U** (fin1 ∧ (inv1 ∧ del1 **U** rea1)))) | inconsistent | inv1 • inv2  ¬((trig1 ∨ trig2 ∨ inv1 ∨ inv2) →  (fin1 ∧ rea1)) |
|  | inconsistent | trig1 • inv2  ¬((trig1 ∨ trig2 ∨ inv1 ∨ inv2) →  (rel2 ∨ fin2∧rea2)) |
|  | inconsistent | trig2 • inv1  ¬((trig1 ∨ trig2 ∨ inv1 ∨ inv2) →  (fin1 ∧ rea1)) |
|  | Inconsistent | fin1 → fin2  fin1 • inv2 |
|  | Inconsistent | rea1 → fin2  rea1 • inv2 |
|  | consistent | inv1 → inv2  fin1 → fin2  del1 → del2  rea1 → rea2 |
|  | unknown | other cases |
| 4 | ***false*** | ***true*** | fin1 | rea1 | inv1 | **G**(trig1 →  (inv1 **U** (fin1 ∧ (inv1 **U** rea1)))) | inconsistent | inv1 • inv2  ¬((trig1 ∨ trig2 ∨ inv1 ∨ inv2) →  (fin1 ∧ rea1)) |
|  | inconsistent | trig1 • inv2  ¬((trig1 ∨ trig2 ∨ inv1 ∨ inv2) →  (rel2 ∨ fin2∧rea2)) |
|  | inconsistent | trig2 • inv1  ¬((trig1 ∨ trig2 ∨ inv1 ∨ inv2) →  (fin1 ∧ rea1)) |
|  | Inconsistent | fin1 → fin2  fin1 • inv2 |
|  | Inconsistent | rea1 → fin2  rea1 • inv2 |
|  | ~~consistent~~ | ~~inv~~~~1~~ ~~→ inv~~~~2~~  ~~fin~~~~1~~ ~~→ fin~~~~2~~  ~~rea~~~~1~~ ~~→ rea~~~~2~~ |
|  | unknown | other cases |
| 5 | ***false*** | ***false*** | fin1 | rea1 | inv1 | **G**(trig1 →  (inv1 **U**  (fin1 ∧ rea1 ))) | inconsistent | inv1 • inv2  ¬((trig1 ∨ trig2 ∨ inv1 ∨ inv2) →  (fin1 ∧ rea1)) |
|  | inconsistent | trig1 • inv2  ¬((trig1 ∨ trig2 ∨ inv1 ∨ inv2) →  (rel2 ∨ (fin2∧rea2))) |
|  | inconsistent | trig2 • inv1  ¬((trig1 ∨ trig2 ∨ inv1 ∨ inv2) →  (fin1 ∧ rea1)) |
|  | Inconsistent | fin1 → fin2  fin1 • inv2 |
|  | Inconsistent | rea1 → fin2  rea1 • inv2 |
|  | consistent | inv1 → inv2  fin1 → fin2  rea1 → rea2 |
|  | unknown | other cases |
| 6 | ***false*** | del1 | ***true*** | rea1 | inv1 | **G**(trig1 →  (inv1 ∧ del1 **U** rea1)) | inconsistent | inv1 • inv2  ¬((trig1 ∨ trig2 ∨ inv1 ∨ inv2) → rea1) |
|  | inconsistent | trig1 • inv2  ¬((trig1 ∨ trig2 ∨ inv1 ∨ inv2) →  (rel2 ∨ fin2∧rea2)) |
|  | inconsistent | trig2 • inv1  ¬((trig1 ∨ trig2 ∨ inv1 ∨ inv2) →rea1) |
|  | ~~Inconsistent~~ | ~~fin~~~~1~~ ~~→ fin~~~~2~~  ~~fin~~~~1~~ ~~• inv~~~~2~~ |
|  | Inconsistent | rea1 → fin2  rea1 • inv2 |
|  | ~~consistent~~ | ~~inv~~~~1~~ ~~→ inv~~~~2~~  ~~fin~~~~1~~ ~~→ fin~~~~2~~  ~~del~~~~1~~ ~~→ del~~~~2~~  ~~rea~~~~1~~ ~~→ rea~~~~2~~ |
|  | unknown | other cases |
| 7 | ***false*** | ***true*** | ***true*** | rea1 | inv1 | **G**(trig1 →  (inv1 **U** rea1)) | inconsistent | inv1 • inv2  ¬((trig1 ∨ trig2 ∨ inv1 ∨ inv2) → rea1) |
|  | inconsistent | trig1 • inv2  ¬((trig1 ∨ trig2 ∨ inv1 ∨ inv2) →  (rel2 ∨ fin2∧rea2)) |
|  | inconsistent | trig2 • inv1  ¬((trig1 ∨ trig2 ∨ inv1 ∨ inv2) →rea1) |
|  | ~~Inconsistent~~ | ~~fin~~~~1~~ ~~→ fin~~~~2~~  ~~fin~~~~1~~ ~~• inv~~~~2~~ |
|  | Inconsistent | rea1 → fin2  rea1 • inv2 |
|  | ~~consistent~~ | ~~inv~~~~1~~ ~~→ inv~~~~2~~  ~~fin~~~~1~~ ~~→ fin~~~~2~~  ~~del~~~~1~~ ~~→ del~~~~2~~  ~~rea~~~~1~~ ~~→ rea~~~~2~~ |
|  | unknown | other cases |
| 8 | ***false*** | ***false*** | ***true*** | rea1 | inv1 | **G**(trig1 → rea1) | inconsistent | inv1 • inv2  ¬((trig1 ∨ trig2 ∨ inv1 ∨ inv2) → rea1) |
|  | inconsistent | trig1 • inv2  ¬((trig1 ∨ trig2 ∨ inv1 ∨ inv2) →  (rel2 ∨ fin2∧rea2)) |
|  | inconsistent | trig2 • inv1  ¬((trig1 ∨ trig2 ∨ inv1 ∨ inv2) →rea1) |
|  | ~~Inconsistent~~ | ~~fin~~~~1~~ ~~→ fin~~~~2~~  ~~fin~~~~1~~ ~~• inv~~~~2~~ |
|  | Inconsistent | rea1 • inv2 |
|  | ~~consistent~~ | ~~inv~~~~1~~ ~~→ inv~~~~2~~  ~~fin~~~~1~~ ~~→ fin~~~~2~~  ~~del~~~~1~~ ~~→ del~~~~2~~  ~~rea~~~~1~~ ~~→ rea~~~~2~~ |
|  | unknown | other cases |
| 9 | ***false*** | del1 | fin1 | ***true*** | inv1 | **G**(trig1 →  inv1 **U** fin1) | inconsistent | inv1 • inv2  ¬((trig1 ∨ trig2 ∨ inv1 ∨ inv2) →  fin1) |
|  | inconsistent | trig1 • inv2  ¬((trig1 ∨ trig2 ∨ inv1 ∨ inv2) →  (rel2 ∨ (fin2∧rea2))) |
|  | inconsistent | trig2 • inv1  ¬((trig1 ∨ trig2 ∨ inv1 ∨ inv2) → fin1) |
|  | Inconsistent | fin1 → fin2  fin1 • inv2 |
|  | ~~consistent~~ | ~~inv~~~~1~~ ~~→ inv~~~~2~~  ~~fin~~~~1~~ ~~→ fin~~~~2~~  ~~del~~~~1~~ ~~→ del~~~~2~~  ~~rea~~~~1~~ ~~→ rea~~~~2~~ |
|  | unknown | other cases |
| 10 | ***false*** | del1 | ***true*** | ***true*** | inv1 | **TRUE** | unknown | all cases |
| 11 | ***false*** | del1 | fin1 | rea1 | ***true*** | **G**(trig1 →  **F** (fin1 ∧  del1 **U** rea1)) | inconsistent | trig1 • inv2  ¬(rel2 ∨ fin2∧rea2) |
|  | Inconsistent | fin1 → fin2  fin1 • inv2 |
|  | Inconsistent | rea1 → fin2  rea1 • inv2 |
|  | ~~consistent~~ | ~~inv~~~~1~~ ~~→ inv~~~~2~~  ~~fin~~~~1~~ ~~→ fin~~~~2~~  ~~del~~~~1~~ ~~→ del~~~~2~~  ~~rea~~~~1~~ ~~→ rea~~~~2~~ |
|  | unknown | other cases |
| 12 | ***false*** | ***true*** | fin1 | rea1 | ***true*** | **G**(trig1 →  **F** (fin1 ∧ **F** rea1)) | inconsistent | trig1 • inv2  ¬(rel2 ∨ fin2∧rea2) |
|  | Inconsistent | fin1 → fin2  fin1 • inv2 |
|  | Inconsistent | rea1 → fin2  rea1 • inv2 |
|  | unknown | other cases |
| 13 | ***false*** | ***false*** | fin1 | rea1 | ***true*** | **G**(trig1 →  **F** (fin1 ∧ rea1)) | inconsistent | trig1 • inv2  ¬(rel2 ∨ fin2∧rea2) |
|  | Inconsistent | fin1 → fin2  fin1 • inv2 |
|  | Inconsistent | rea1 → fin2  rea1 • inv2 |
|  | unknown | other cases |
| 14 | ***false*** | del1 | ***true*** | rea1 | ***true*** | **G**(trig1 →  del1 **U** rea1) | inconsistent | trig1 • inv2  ¬(rel2 ∨ fin2∧rea2) |
|  | Inconsistent | rea1 → fin2  rea1 • inv2 |
|  | unknown | other cases |
| 15 | ***false*** | ***true*** | ***true*** | rea1 | ***true*** | **G**(trig1 →**F**rea1) | inconsistent | trig1 • inv2  ¬(rel2 ∨ fin2∧rea2) |
|  | Inconsistent | rea1 → fin2  rea1 • inv2 |
|  | unknown | other cases |
| 16 | ***false*** | ***false*** | ***true*** | rea1 | ***true*** | **G**(trig1 →rea1) | inconsistent | trig1 • inv2  ¬(rel2 ∨ fin2∧rea2) |
|  | Inconsistent | rea1 • inv2 |
|  | unknown | other cases |
| 17 | ***false*** | del1  ***true***  ***false*** | fin1 | ***true*** | ***true*** | **G**(trig1 → **F** fin1) | inconsistent | trig1 • inv2  ¬(rel2 ∨ fin2∧rea2)) |
|  | Inconsistent | fin1 → fin2  fin1 • inv2 |
|  | 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 | rel1 | any | ***false*** | any | inv1 | **G**(trig1 →  inv1 **W** rel1) | inconsistent | inv1 • inv2  ¬((trig1 ∨ trig2 ∨ inv1 ∨ inv2) → rel1)  ¬((trig1 ∨ trig2 ∨ inv1 ∨ inv2) →  (rel2 ∨ fin2∧rea2)) |
|  | inconsistent | trig1 • inv2  ¬((trig1 ∨ trig2 ∨ inv1 ∨ inv2) →  (rel2 ∨ fin2∧rea2)) |
|  | inconsistent | trig2 • inv1  ¬((trig1 ∨ trig2 ∨ inv1 ∨ inv2) →  rel1) |
|  | inconsistent | rel1 → fin2  rel1 • inv2 |
|  | unknown | other cases |
| 22 | ***true*** | any | ***false*** | any | any | **TRUE** | unknown | all cases |
| 23 | ***false*** | any | ***false*** | any | inv1 | **G**(trig1 → inv1) | inconsistent | inv1 • inv2  ¬((trig1 ∨ trig2 ∨ inv1 ∨ inv2) →  (rel2 ∨ fin2∧rea2)) |
|  | inconsistent | trig1 • inv2  ¬((trig1 ∨ trig2 ∨ inv1 ∨ inv2) →  (rel2 ∨ fin2∧rea2)) |
|  | inconsistent | trig2 • inv1 |
|  | unknown | other cases |
| 24 | ***false*** | any | ***false*** | any | ***true*** | **TRUE** | unknown | all cases |
| 25 | ***false*** | any | ***false*** | any | ***false*** | **FALSE** | inconsistent | all cases |
| 26 | rel1 | any | ***false*** | any | ***true*** | **G**(trig1 →  ***true*****W** rel1) = **TRUE** | unknown | all cases |
| 27 | rel1 | any | ***false*** | any | ***false*** | **G**(trig1 →  ***false*****W** rel1) = **FALSE** | inconsistent | all cases |
| 28 | rel1 | del1 | ***true*** | rea1 | inv1 | **G**(trig1 →  ((inv1 ∧ del1)**U** (rel1 ∨ rea1))) | inconsistent | inv1 •∘ inv2  ¬((trig1 ∨ trig2 ∨ inv1 ∨ inv2) →  (rel1 ∨ rea1))  ¬((trig1 ∨ trig2 ∨ inv1 ∨ inv2) →  (rel2 ∨ fin2∧rea2)) |
|  | inconsistent | trig1 • inv2  ¬((trig1 ∨ trig2 ∨ inv1 ∨ inv2) →  (rel2 ∨ fin2∧rea2)) |
|  | inconsistent | trig2 • inv1  ¬((trig1 ∨ trig2 ∨ inv1 ∨ inv2) →  (rel1 ∨ rea1)) |
|  | inconsistent | rel1 → fin2  rel1 • inv2  ¬(fin2 →  (rel2 ∨ rea2)) |
|  | inconsistent | rea1 → fin2  rea1 • inv2  ¬(fin2 →  (rel2 ∨ rea2)) |
|  | unknown | other cases |
| 29 | rel1 | ***true*** | ***true*** | rea1 | inv1 | **G**(trig1 →  (inv1 **U** (rel1 ∨ rea1))) | inconsistent | inv1 • inv2  ¬((trig1 ∨ trig2 ∨ inv1 ∨ inv2) →  (rel1 ∨ rea1))  ¬((trig1 ∨ trig2 ∨ inv1 ∨ inv2) →  (rel2 ∨ fin2∧rea2)) |
|  | inconsistent | trig1 • inv2  ¬((trig1 ∨ trig2 ∨ inv1 ∨ inv2) →  (rel2 ∨ fin2∧rea2)) |
|  | inconsistent | trig2 • inv1  ¬((trig1 ∨ trig2 ∨ inv1 ∨ inv2) →  (rel1 ∨ rea1)) |
|  | inconsistent | rel1 → fin2  rel1 • inv2  ¬(fin2 →  (rel2 ∨ rea2)) |
|  | inconsistent | rea1 → fin2  rea1 • inv2  ¬(fin2 →  (rel2 ∨ rea2)) |
|  | unknown | other cases |
| 30 | rel1 | ***false*** | ***true*** | rea1 | any | **G**(trig1 →  (rel1 ∨ rea1)) | inconsistent | trig1 • inv2  ¬((trig1 ∨ trig2 ∨ inv2) →  (rel2 ∨ fin2∧rea2)) |
|  | inconsistent | rel1 • inv2 |
|  | inconsistent | rea1 • inv2 |
|  | unknown | other cases |
| 31 | any | any | ***true*** | ***true*** | any | **G**(trig1 →  ((inv1 ∧ del1)**U** (rel1 ∨ ***true***))) =  **TRUE** | unknown | all cases |
| 32 | rel1 | del1 | ***true*** | ***false*** | inv1 | **G**(trig1 →  ((inv1 ∧ del1)**U** rel1)) | inconsistent | inv1 • inv2  ¬((trig1 ∨ trig2 ∨ inv1 ∨ inv2) →  rel1)  ¬((trig1 ∨ trig2 ∨ inv1 ∨ inv2) →  (rel2 ∨ fin2∧rea2)) |
|  | inconsistent | trig1 • inv2  ¬((trig1 ∨ trig2 ∨ inv1 ∨ inv2) →  (rel2 ∨ fin2∧rea2)) |
|  | inconsistent | trig2 • inv1  ¬((trig1 ∨ trig2 ∨ inv1 ∨ inv2) →  rel1 ) |
|  | inconsistent | rel1 → fin2  rel1 • inv2  ¬(fin2 →  (rel2 ∨ rea2)) |
|  | unknown | other cases |
| 33 | rel1 | ***false*** | ***true*** | ***false*** | any | **G**(trig1 →  ((inv1 ∧ ***false***)**U** rel1)) = **FALSE** | inconsistent | all cases |
| 34 | rel1 | ***true*** | ***true*** | ***false*** | inv1 | **G**(trig1 →  (inv1 **U** rel1)) | inconsistent | inv1 • inv2  ¬((trig1 ∨ trig2 ∨ inv1 ∨ inv2) →  rel1)  ¬((trig1 ∨ trig2 ∨ inv1 ∨ inv2) →  (rel2 ∨ fin2∧rea2)) |
|  | inconsistent | trig1 • inv2  ¬((trig1 ∨ trig2 ∨ inv1 ∨ inv2) →  (rel2 ∨ fin2∧rea2)) |
|  | inconsistent | trig2 • inv1  ¬((trig1 ∨ trig2 ∨ inv1 ∨ inv2) →  rel1 ) |
|  | inconsistent | rel1 → fin2  rel1 • inv2  ¬(fin2 →  (rel2 ∨ rea2)) |
|  | unknown | other cases |
| 35 | rel1 | any | ***true*** | any | ***false*** | **G**(trig1 →  ((***false*** ∧ del1)**U** (rel1 ∨ rea1))) =  **FALSE** | inconsistent | all cases |
| 36 | rel1 | del1 | ***true*** | rea1 | ***true*** | **G**(trig1 →  (del1 **U** (rel1 ∨ rea1))) | inconsistent | trig1 • inv2  ¬(rel2 ∨ fin2∧rea2) |
|  | inconsistent | rel1 → fin2  rel1 • inv2  ¬(fin2 →  (rel2 ∨ rea2)) |
|  | inconsistent | rea1 → fin2  rea1 • inv2  ¬(fin2 →  (rel2 ∨ rea2)) |
|  | unknown | other cases |
| 37 | rel1 | ***true*** | ***true*** | rea1 | ***true*** | **G**(trig1 →  **F** (rel1 ∨ rea1)) | inconsistent | trig1 • inv2  ¬(rel2 ∨ fin2∧rea2) |
|  | inconsistent | rel1 → fin2  rel1 • inv2  ¬(fin2 →  (rel2 ∨ rea2)) |
|  | inconsistent | rea1 → fin2  rea1 • inv2  ¬(fin2 →  (rel2 ∨ rea2)) |
|  | unknown | other cases |
| 38 | rel1 | ***false*** | ***true*** | rea1 | ***true*** | **G**(trig1 →  rel1 ∨ rea1) | inconsistent | trig1 • inv2  ¬(rel2 ∨ fin2∧rea2) |
|  | inconsistent | rel1 • inv2 |
|  | inconsistent | rea1 • inv2 |
|  | unknown | other cases |
| 39 | rel1 | any | ***true*** | ***true*** | ***true*** | **G**(trig1 →  (del1 **U** rel1 ∨ ***true***))) = **TRUE** | unknown | all cases |
| 40 | rel1 | del1 | ***true*** | ***false*** | ***true*** | **G**(trig1 →  (del1 **U** rel1) | inconsistent | trig1 • inv2  ¬(rel2 ∨ fin2∧rea2) |
|  | inconsistent | rel1 → fin2  rel1 • inv2  ¬(fin2 →  (rel2 ∨ rea2)) |
|  | unknown | other cases |
| 41 | rel1 | ***true*** | ***true*** | ***false*** | ***true*** | **G**(trig1 → **F** rel1) | inconsistent | trig1 • inv2  ¬(rel2 ∨ fin2∧rea2) |
|  | inconsistent | rel1 → fin2  rel1 • inv2  ¬(fin2 →  (rel2 ∨ rea2)) |
|  | unknown | other cases |
| 42 | rel1 | ***false*** | ***true*** | ***false*** | ***true*** | **G**(trig1 → rel1) | inconsistent | trig1 • inv2  ¬(rel2 ∨ fin2∧rea2) |
|  | inconsistent | rel1 • inv2 |
|  | unknown | other cases |
| 48 | rel1 | ***true*** | fin1 | rea1 | inv1 | **G**(trig1 → ((inv1 ∧ ¬fin1 **W**rel1) ∨  (inv1**U**(fin1 ∧ (inv1 **U** (rel1∨rea1)))))) | inconsistent | inv1 • inv2  ¬((trig1 ∨ trig2 ∨ inv1 ∨ inv2) →  (rel1 ∨ fin1∧rea1))  ¬((trig1 ∨ trig2 ∨ inv1 ∨ inv2) →  (rel2 ∨ fin2∧rea2)) |
|  | inconsistent | trig1 • inv2  ¬((trig1 ∨ trig2 ∨ inv1 ∨ inv2) →  (rel2 ∨ fin2∧rea2)) |
|  | inconsistent | trig2 • inv1  ¬((trig1 ∨ trig2 ∨ inv1 ∨ inv2) →  (rel1 ∨ fin1∧rea1)) |
|  | inconsistent | rel1 → fin2  rel1 • inv2  fin1 → fin2  fin1 • inv2  ¬((rel1 ∨ fin1∨ fin2) →  (rel2 ∨ fin2∧rea2)) |
|  | inconsistent | rel1 → fin2  rel1 • inv2  rea1 → fin2  rea1 • inv2  ¬((rel1 ∨ rea1∨ fin2) →  (rel2 ∨ fin2∧rea2)) |
|  | ~~consistent~~ | ~~inv~~~~1~~ ~~→ inv~~~~2~~  ~~fin~~~~1~~ ~~→ fin~~~~2~~  ~~del~~~~1~~ ~~→ del~~~~2~~  ~~rea~~~~1~~ ~~→ rea~~~~2~~  ~~rel~~~~1~~ ~~→ rel~~~~2~~ |
|  | unknown | other cases |
| 49 | rel1 | ***true*** | fin1 | rea1 | ***true*** | **G**(trig1 →  ((¬fin1 **W**rel1) ∨  **F**(fin1 ∧  **F** (rel1∨rea1)))) | inconsistent | trig1 • inv2  ¬(rel2 ∨ fin2∧rea2) |
|  |  |  |  |  |  |  | inconsistent | rel1 → fin2  rel1 • inv2  fin1 → fin2  fin1 • inv2  ¬((rel1 ∨ fin1∨ fin2) →  (rel2 ∨ fin2∧rea2)) |
|  |  |  |  |  |  |  | inconsistent | rel1 → fin2  rel1 • inv2  rea1 → fin2  rea1 • inv2  ¬((rel1 ∨ rea1∨ fin2) →  (rel2 ∨ fin2∧rea2)) |
|  |  |  |  |  |  |  | unknown | other cases |
| 50 | rel1 | ***true*** | fin1 | rea1 | ***false*** | **G**(trig1 → (rel1 ∨ (fin1 ∧ rea1))) | inconsistent | trig1 • inv2  ¬((trig1 ∨ trig2 ∨ inv2) →  (rel2 ∨ fin2∧rea2)) |
|  |  |  |  |  |  |  | inconsistent | rel1 → fin2  rel1 • inv2  fin1 → fin2  fin1 • inv2  ¬((rel1 ∨ fin1∨ fin2) →  (rel2 ∨ fin2∧rea2)) |
|  |  |  |  |  |  |  | inconsistent | rel1 → fin2  rel1 • inv2  rea1 → fin2  rea1 • inv2  ¬((rel1 ∨ rea1∨ fin2) →  (rel2 ∨ fin2∧rea2)) |
|  |  |  |  |  |  |  | unknown | other cases |
| 51 | rel1 | ***true*** | fin1 | ***true*** | inv1 | **G**(trig1 → ((inv1 ∧ ¬fin1 **W**rel1) ∨  (inv1**U** fin1))) | inconsistent | inv1 • inv2  ¬((trig1 ∨ trig2 ∨ inv1 ∨ inv2) →  (rel1 ∨ fin1))  ¬((trig1 ∨ trig2 ∨ inv1 ∨ inv2) →  (rel2 ∨ fin2∧rea2)) |
|  | inconsistent | trig1 • inv2  ¬((trig1 ∨ trig2 ∨ inv1 ∨ inv2) →  (rel2 ∨ fin2∧rea2)) |
|  | inconsistent | trig2 • inv1  ¬((trig1 ∨ trig2 ∨ inv1 ∨ inv2) →  (rel1 ∨ fin1)) |
|  | inconsistent | rel1 → fin2  rel1 • inv2  fin1 → fin2  fin1 • inv2  ¬((rel1 ∨ fin1∨ fin2) →  (rel2 ∨ fin2∧rea2)) |
|  | unknown | other cases |
| 52 | rel1 | ***true*** | fin1 | ***true*** | ***true*** | **G**(trig1 → (¬fin1 **W**rel1) ∨ **F** fin1)) | inconsistent | trig1 • inv2  ¬(rel2 ∨ fin2∧rea2) |
|  | inconsistent | rel1 → fin2  rel1 • inv2  fin1 → fin2  fin1 • inv2  ¬((rel1 ∨ fin1∨ fin2) →  (rel2 ∨ fin2∧rea2)) |
|  | unknown | other cases |
| 53 | rel1 | ***true*** | fin1 | ***true*** | ***false*** | **G**(trig1 →  (rel1 ∨ fin1)) | inconsistent | trig1 • inv2  ¬((trig1 ∨ trig2 ∨ inv2) →  (rel2 ∨ fin2∧rea2)) |
|  | inconsistent | rel1 → fin2  rel1 • inv2  fin1 → fin2  fin1 • inv2  ¬((rel1 ∨ fin1∨ fin2) →  (rel2 ∨ fin2∧rea2)) |
|  | unknown | other cases |
| 54 | rel1 | ***true*** | fin1 | ***false*** | inv1 | **G**(trig1 → (inv1 ∧ ¬fin1 **W**rel1)) | inconsistent | inv1 • inv2  ¬((trig1 ∨ trig2 ∨ inv1 ∨ inv2) →rel1)  ¬((trig1 ∨ trig2 ∨ inv1 ∨ inv2) →  (rel2 ∨ fin2∧rea2)) |
|  | inconsistent | trig1 • inv2  ¬((trig1 ∨ trig2 ∨ inv1 ∨ inv2) →  (rel2 ∨ fin2∧rea2)) |
|  | inconsistent | trig2 • inv1  ¬((trig1 ∨ trig2 ∨ inv1 ∨ inv2) →rel1) |
|  | inconsistent | rel1 → fin2  rel1 • inv2  fin1 → fin2  fin1 • inv2  ¬((rel1 ∨ fin1∨fin2) →  (rel2 ∨ fin2∧rea2)) |
|  | unknown | other cases |
| 55 | rel1 | ***true*** | fin1 | ***false*** | ***false*** | **G**(trig1 → rel1) | inconsistent | trig1 • inv2  ¬((trig1 ∨ trig2 ∨ inv2) →  (rel2 ∨ fin2∧rea2)) |
|  | inconsistent | rel1 • inv2  ¬((trig1 ∨ trig2 ∨ rel1 ∨ inv2) →  (rel2 ∨ fin2∧rea2)) |
|  | unknown | other cases |
| 56 | rel1 | ***true*** | fin1 | ***false*** | ***true*** | **G**(trig1 →  (¬fin1 **W**rel1)) | inconsistent | trig1 • inv2  ¬(rel2 ∨ fin2∧rea2) |
|  | inconsistent | rel1 → fin2  rel1 • inv2  fin1 → fin2  fin1 • inv2  ¬((rel1 ∨ fin1∨fin2) →  (rel2 ∨ fin2∧rea2)) |
|  | unknown | other cases |
| 57 | rel1 | ***false*** | fin1 | rea1 | inv1 | **G**(trig1 → ((inv1 ∧ ¬fin1 **W**rel1) ∨  (inv1**U**(fin1 ∧ (rel1∨rea1))))) | inconsistent | inv1 • inv2  ¬((trig1 ∨ trig2 ∨ inv1 ∨ inv2) →  (rel1 ∨ fin1∧rea1))  ¬((trig1 ∨ trig2 ∨ inv1 ∨ inv2) →  (rel2 ∨ fin2∧rea2)) |
|  | inconsistent | trig1 • inv2  ¬((trig1 ∨ trig2 ∨ inv1 ∨ inv2) →  (rel2 ∨ fin2∧rea2)) |
|  | inconsistent | trig2 • inv1  ¬((trig1 ∨ trig2 ∨ inv1 ∨ inv2) →  (rel1 ∨ fin1∧rea1)) |
|  | inconsistent | rel1 → fin2  rel1 • inv2  fin1 → fin2  fin1 • inv2  ¬((rel1 ∨ fin1∨ fin2) →  (rel2 ∨ fin2∧rea2)) |
|  | inconsistent | rel1 → fin2  rel1 • inv2  rea1 → fin2  rea1 • inv2  ¬((rel1 ∨ rea1∨ fin2) →  (rel2 ∨ fin2∧rea2)) |
|  | unknown | other cases |
| 58 | rel1 | ***false*** | fin1 | rea1 | ***true*** | **G**(trig1 → (¬fin1 **W**rel1) ∨  **F**(fin1 ∧ (rel1∨rea1))) | inconsistent | trig1 • inv2  ¬(rel2 ∨ fin2∧rea2) |
|  | inconsistent | rel1 → fin2  rel1 • inv2  fin1 → fin2  fin1 • inv2  ¬((rel1 ∨ fin1∨ fin2) →  (rel2 ∨ fin2∧rea2)) |
|  | inconsistent | rel1 → fin2  rel1 • inv2  rea1 → fin2  rea1 • inv2  ¬((rel1 ∨ rea1∨ fin2) →  (rel2 ∨ fin2∧rea2)) |
|  | unknown | other cases |
| 59 | rel1 | ***false*** | fin1 | rea1 | ***false*** | **G**(trig1 → (rel1∨  (fin1 ∧ rea1))) | inconsistent | trig1 • inv2  ¬((trig1 ∨ trig2 ∨ inv2) →  (rel2 ∨ fin2∧rea2)) |
|  | inconsistent | rel1 → fin2  rel1 • inv2  fin1 → fin2  fin1 • inv2  ¬((rel1 ∨ fin1∨ fin2) →  (rel2 ∨ fin2∧rea2)) |
|  | inconsistent | rel1 → fin2  rel1 • inv2  rea1 → fin2  rea1 • inv2  ¬((rel1 ∨ rea1∨ fin2) →  (rel2 ∨ fin2∧rea2)) |
|  | unknown | other cases |
| 60 | rel1 | ***false*** | fin1 | ***true*** | any | **TRUE** | unknown | all cases |
| 61 | rel1 | ***false*** | fin1 | ***false*** | inv1 | **G**(trig1 → ((inv1 ∧ ¬fin1 **W**rel1) ∨  (inv1**U**(fin1 ∧ rel1)))) | inconsistent | inv1 • inv2  ¬((trig1 ∨ trig2 ∨ inv1 ∨ inv2) →rel1)  ¬((trig1 ∨ trig2 ∨ inv1 ∨ inv2) →  (rel2 ∨ fin2∧rea2)) |
|  |  |  |  |  |  |  | inconsistent | trig1 • inv2  ¬((trig1 ∨ trig2 ∨ inv1 ∨ inv2) →  (rel2 ∨ fin2∧rea2)) |
|  |  |  |  |  |  |  | inconsistent | trig2 • inv1  ¬((trig1 ∨ trig2 ∨ inv1 ∨ inv2) →rel1) |
|  |  |  |  |  |  |  | inconsistent | rel1 → fin2  rel1 • inv2  fin1 → fin2  fin1 • inv2  ¬((rel1 ∨ fin1∨ fin2) →  (rel2 ∨ fin2∧rea2)) |
|  |  |  |  |  |  |  | unknown | other cases |
| 62 | rel1 | del1 | fin1 | rea1 | ***true*** | **G**(trig1 →  (¬fin1 **W**rel1) ∨  (**F**(fin1 ∧ (del1 **U**(rel1∨rea1)))))) | inconsistent | trig1 • inv2  ¬(rel2 ∨ fin2∧rea2) |
|  |  |  |  |  |  |  | inconsistent | rel1 → fin2  rel1 • inv2  fin1 → fin2  fin1 • inv2  ¬((rel1 ∨ fin1∨ fin2) →  (rel2 ∨ fin2∧rea2)) |
|  |  |  |  |  |  |  | inconsistent | rel1 → fin2  rel1 • inv2  rea1 → fin2  rea1 • inv2  ¬((rel1 ∨ rea1∨ fin2) →  (rel2 ∨ fin2∧rea2)) |
|  |  |  |  |  |  |  | unknown | other cases |
| 63 | rel1 | del1 | fin1 | rea1 | ***false*** | **G**(trig1 →  (rel1 ∨  fin1 ∧ rea1)) | inconsistent | trig1 • inv2  ¬((trig1 ∨ trig2 ∨ inv2) →  (rel2 ∨ fin2∧rea2)) |
|  |  |  |  |  |  |  | inconsistent | rel1 → fin2  rel1 • inv2  fin1 → fin2  fin1 • inv2  ¬((rel1 ∨ fin1∨ fin2) →  (rel2 ∨ fin2∧rea2)) |
|  |  |  |  |  |  |  | inconsistent | rel1 → fin2  rel1 • inv2  rea1 → fin2  rea1 • inv2  ¬((rel1 ∨ rea1∨ fin2) →  (rel2 ∨ fin2∧rea2)) |
|  |  |  |  |  |  |  | unknown | other cases |
| 64 | rel1 | del1 | fin1 | ***true*** | any | **TRUE** | unknown | all cases |
| 65 | rel1 | del1 | fin1 | ***false*** | inv1 | **G**(trig1 → (inv1 ∧ ¬fin1 **W**rel1)) | inconsistent | inv1 • inv2  ¬((trig1 ∨ trig2 ∨ inv1 ∨ inv2) →rel1)  ¬((trig1 ∨ trig2 ∨ inv1 ∨ inv2) →  (rel2 ∨ fin2∧rea2)) |
|  |  |  |  |  |  |  | inconsistent | trig1 • inv2  ¬((trig1 ∨ trig2 ∨ inv1 ∨ inv2) →  (rel2 ∨ fin2∧rea2)) |
|  |  |  |  |  |  |  | inconsistent | trig2 • inv1  ¬((trig1 ∨ trig2 ∨ inv1 ∨ inv2) →rel1) |
|  |  |  |  |  |  |  | inconsistent | rel1 → fin2  rel1 • inv2  fin1 → fin2  fin1 • inv2  ¬((rel1 ∨ fin1∨fin2) →  (rel2 ∨ fin2∧rea2)) |
|  |  |  |  |  |  |  | unknown | other cases |
| 66 | rel1 | del1 | fin1 | ***false*** | ***false*** | **G**(trig1 → rel1) | inconsistent | trig1 • inv2  ¬((trig1 ∨ trig2 ∨ inv2) →  (rel2 ∨ fin2∧rea2)) |
|  |  |  |  |  |  |  | inconsistent | rel1 • inv2  ¬((trig1 ∨ trig2 ∨ rel1 ∨ inv2) →  (rel2 ∨ fin2∧rea2)) |
|  |  |  |  |  |  |  | unknown | other cases |
| 67 | rel1 | del1 | fin1 | ***false*** | ***true*** | **G**(trig1 →  (¬fin1 **W**rel1)) | inconsistent | trig1 • inv2  ¬(rel2 ∨ fin2∧rea2) |
|  |  |  |  |  |  |  | inconsistent | rel1 → fin2  rel1 • inv2  fin1 → fin2  fin1 • inv2  ¬((rel1 ∨ fin1∨fin2) →  (rel2 ∨ fin2∧rea2)) |
|  |  |  |  |  |  |  | unknown | other cases |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |