

Inference at \* 1 0  
of proof for Lemma neg\_assert\_of\_eq\_int:

1.  $x : \mathbb{Z}$   
2.  $y : \mathbb{Z}$   
 $\vdash (\neg(\uparrow(x =_0 y))) \iff x \neq y$   
by PERMUTE{1:n, 2:n, 3:n, 3:n, 4:n, 5:n, 6:n, 7:n, 8:n, 9:n}

1: .....wf..... NILNIL

$\vdash (\neg(\uparrow(x =_0 y))) \in \mathbb{P}_1$

2: .....wf..... NILNIL

$\vdash (\neg(x = y)) \in \mathbb{P}_1$

3: .....wf..... NILNIL

$\vdash x \neq y \in \mathbb{P}_1$

4: .....wf..... NILNIL

$\vdash (\uparrow(x =_0 y)) \in \mathbb{P}_1$

5: .....wf..... NILNIL

$\vdash (x = y) \in \mathbb{P}_1$

6: .....wf..... NILNIL

$\vdash x \in \mathbb{Z}$

7: .....wf..... NILNIL

$\vdash y \in \mathbb{Z}$

8: .....wf..... NILNIL

$\vdash x \neq y = x \neq y$

9:

$\vdash (\neg(x = y)) \iff x \neq y$

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