Proof of Theorem 13b

The theorem to be proved is

$0 + 0 = 0 + 0$

Suppose the theorem does not hold. Then, with the variables held fixed,

(H) $[[\neg\ (0 + 0) = (0 + 0)]]$

Special cases of the hypothesis and previous results:

0: $\neg\ 0 + 0 = 0 + 0$ from H

1: $0 + 0 = 0 + 0$ from 5;$0 + 0$

Inferences:

2: QEA by

0: $\neg\ 0 + 0 = 0 + 0$

1: $0 + 0 = 0 + 0$