

SUBJECT:

DATE: / /

Proof of Φ_4 (ME)

Contradiction:

Assume $p_4 \wedge q_4$

(Case 1) $p_3 \rightarrow p_4, q_4$

Φ_3 gives us that $want_q = -1$

$p_3 \rightarrow p_4$ implies that $want_p \neq want_q$

in order for p to be at q_4 ,

$want_p = 1 \wedge want_q = -1$. This breaks Φ_3

(Case 2) $p_4, q_3 \rightarrow q_4$

Same logic as case 1 but mirrored

End of proof by contradiction

Φ_4 must be true and ME is upheld