

Exercise 6.13

$E(\phi_1 \cup \phi_2)$ says that it is possible to reach a state (possibly without moving at all) such that the state satisfies ϕ_2 and all earlier states on the path (that is, excluding the last state) satisfy ϕ_1

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| $E(\phi_1 \cup \phi_2)$ | it is possible to go to ϕ_2 while obeying ϕ_1 |
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$A(\phi_1 \cup \phi_2)$ says that ¹⁾it is impossible not to eventually reach a state (including without moving at all) satisfying ϕ_2 , and ²⁾that until reaching a state satisfying ϕ_2 all earlier states on the path (that is, excluding the last state) satisfy ϕ_1

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| $A(\phi_1 \cup \phi_2)$ | ¹⁾ it is not possible to escape ϕ_2 forever, and ²⁾ it is not possible to disobey ϕ_1 before reaching ϕ_2 |
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