

88 Exercise 12 talks about drinking and driving, but not about time. It's not all right to drink first and then drive soon after, but it is all right to drive first and then drink soon after. It is also all right to drink first and then drive 6 hours after. Let *drink* and *drive* be predicates of time, and formalize the rule that you can't drive for 6 hours after drinking. What does your rule say about drinking and driving at the same time?

After trying the question, scroll down to the solution.

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$$\forall t, u: \text{time} \cdot t \leq u < t+6 \Rightarrow \neg(\text{drink } t \wedge \text{drive } u)$$

where *time* is measured in hours. This rule says no drinking and driving at the same time.