

Exercise 8 (deadline: December 10th, 4pm)

Exercise 12.13

Let x be a variable with the domain $\{u, v, w\}$ and p be a boolean variable. Transform the following formula of PLFD into a propositional formula: $\neg x = v \rightarrow x = u \wedge p = 0$.

The following two exercises use the vending machine system from the lectures and the reading material.

Exercise 13.1 (part 2)

We know that students only drink beer while professors only drink coffee. Represent the set of states in which there is a drink in the dispenser but it does not suit the current customer.

Exercise 13.2 (part 1)

Represent symbolically the money-swallowing transition: this transition can remove any amount of coins from the coin slot.

Exercise 13.9

The variable x range over the domain $\{1, 2, 3\}$. Represent the transition which strictly increases the value of x .