A theory provides three names: set, flip, and ask. It is presented by an implementation. Let \( u: bin \) be the user's variable, and let \( v: bin \) be the implementer's variable. The axioms are

\[
\text{set} \equiv v := \top
\]

\[
\text{flip} \equiv v := \neg v
\]

\[
\text{ask} \equiv u := v
\]

(a) Replace \( v \) with \( w: \text{nat} \) according to the data transformer \( v = \text{even } w \).

(b) Replace \( v \) with \( w: \text{nat} \) according to the data transformer \( (w=0 \Rightarrow v) \land (w=1 \Rightarrow \neg v) \). Is anything wrong?

(c) Replace \( v \) with \( w: \text{nat} \) according to \( (v \Rightarrow w=0) \land (\neg v \Rightarrow w=1) \). Is anything wrong?