

a)

Property space:

Set: $V \times E \times E$ Meet operation: \cup **b)**

$$\forall l \in \text{nodes}, \text{out}(l) = \text{In}(l) \setminus \{ \langle x, v \rangle \mid \forall x \in \text{write}(l) \wedge x \in \text{read}(v) \} \cup \{ \langle y, l \rangle \mid \forall y \in \text{read}(l) \}$$

The input and output of each node, u , is defined as a set of tuples $S = \langle x, v \rangle$. The output S of a node u means that $\forall \langle x, v \rangle \in S, \langle x, v \rangle \in UEU(u)$.

c)

- Backward Analysis
- Initial nodes: all nodes before return
- Before work-list algorithm starts : all nodes are given input set \emptyset