$$
\begin{array}{rcl}
kill_{\mathsf{RD}}([x := a]^\ell) & = & \{(x, ?)\} \\
 & & \cup\{(x, \ell') \mid B^{\ell'} \text{ is an assignment to } x \text{ in } S_\star\} \\
kill_{\mathsf{RD}}([\mathtt{skip}]^\ell) & = & \emptyset \\
kill_{\mathsf{RD}}([b]^\ell) & = & \emptyset \\
\\
gen_{\mathsf{RD}}([x := a]^\ell) & = & \{(x, \ell)\} \\
gen_{\mathsf{RD}}([\mathtt{skip}]^\ell) & = & \emptyset \\
gen_{\mathsf{RD}}([b]^\ell) & = & \emptyset
\end{array}
$$

data flow equations: $\mathsf{RD}^=$

$$
\begin{array}{rcl}
\mathsf{RD}_{entry}(\ell) & = & \begin{cases} \{(x, ?) \mid x \in FV(S_\star)\} & \text{if } \ell = init(S_\star) \\ \bigcup\{\mathsf{RD}_{exit}(\ell') \mid (\ell', \ell) \in flow(S_\star)\} & \text{otherwise} \end{cases} \\
\\
\mathsf{RD}_{exit}(\ell) & = & (\mathsf{RD}_{entry}(\ell) \setminus kill_{\mathsf{RD}}(B^\ell)) \cup gen_{\mathsf{RD}}(B^\ell) \\
 & & \text{where } B^\ell \in blocks(S_\star)
\end{array}
$$