

$R_1$   $\text{sum}([], 0)$ .

$R_2$   $\text{sum}([x|xs], x+s) :- \text{sum}(xs, s)$ .

$G_0 = \langle \text{sum}([100], N) \mid \text{true} \rangle$

$\swarrow R_1$   
 $\langle \blacksquare \mid \text{false} \rangle$

$\Downarrow R_2$   
 $\langle \text{sum}([], s) \mid N = s + 100 \rangle$

$\swarrow R_1$   
 $\langle \square \mid N = 100 \rangle$

$\Downarrow R_2$   
 $\langle \blacksquare \mid \text{false} \rangle$

