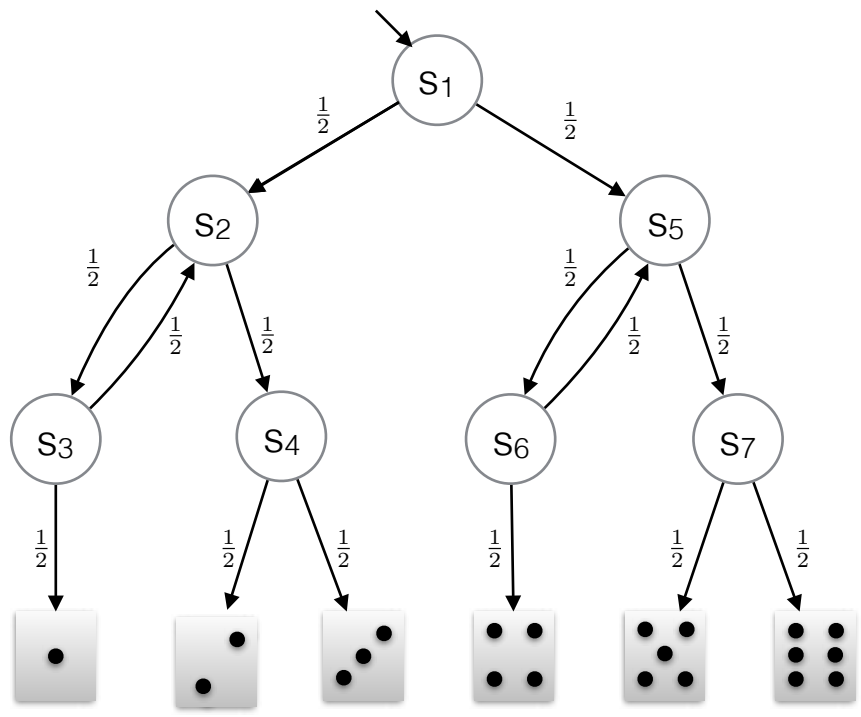

Expected time to reach $r_1 \ldots r_6$

$e(r_i) = 0$ for all $1 \leq i \leq 6$

$$e(s_1) = 1 + 1/2 \cdot e(s_2) + 1/2 \cdot e(s_5)$$

$$e(s_2) = 1 + 1/2 \cdot e(s_3) + 1/2 \cdot e(s_4)$$

$$e(s_3) = 1 + 1/2 \cdot e(r_1) + 1/2 \cdot e(s_2)$$

$$e(s_4) = 1 + 1/2 \cdot e(r_2) + 1/2 \cdot e(r_3)$$

$$e(s_5) = 1 + 1/2 \cdot e(s_6) + 1/2 \cdot e(s_7)$$

$$e(s_6) = 1 + 1/2 \cdot e(r_4) + 1/2 \cdot e(s_5)$$

$$e(s_7) = 1 + 1/2 \cdot e(r_5) + 1/2 \cdot e(r_6)$$

$$e(s_1) = 11/3 \approx 3.67$$