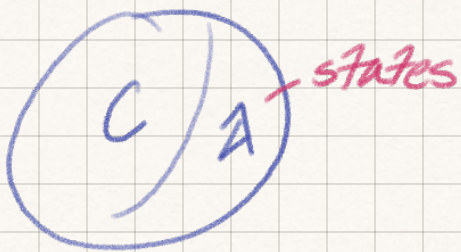


# Exit Time

Let  $C = S \setminus A = S \setminus A'$  be finite



$$P_i(V_A < \infty) > 0, P(V_A < \infty | X(0) = i) > 0$$

prob to reach A in finite time if you started @ state i

$\mathbb{E}(\text{time})$  to exit states C if you started @  $i \in C$   $g(i)$

$$g(i) = \mathbb{E}_i V_A$$

$$v_i g(i) = v_i \left[ \frac{1}{v_i} + \sum_{j:j} \right]$$