



STATE VALUE FUNCTION

$$V_\pi(s) = \sum_a \pi(a|s) \underbrace{\sum_{s'} p(s'|s, a) [r + \gamma V_\pi(s')]}_{Q_\pi(s, a)}$$

STATE ACTION VALUE FUNCTION

$$Q_\pi(s, a) = \sum_{s'} p(s'|s, a) [r + \gamma \underbrace{V_\pi(s')}_{\sum_a \pi(a|s) Q_\pi(s', a)}]$$