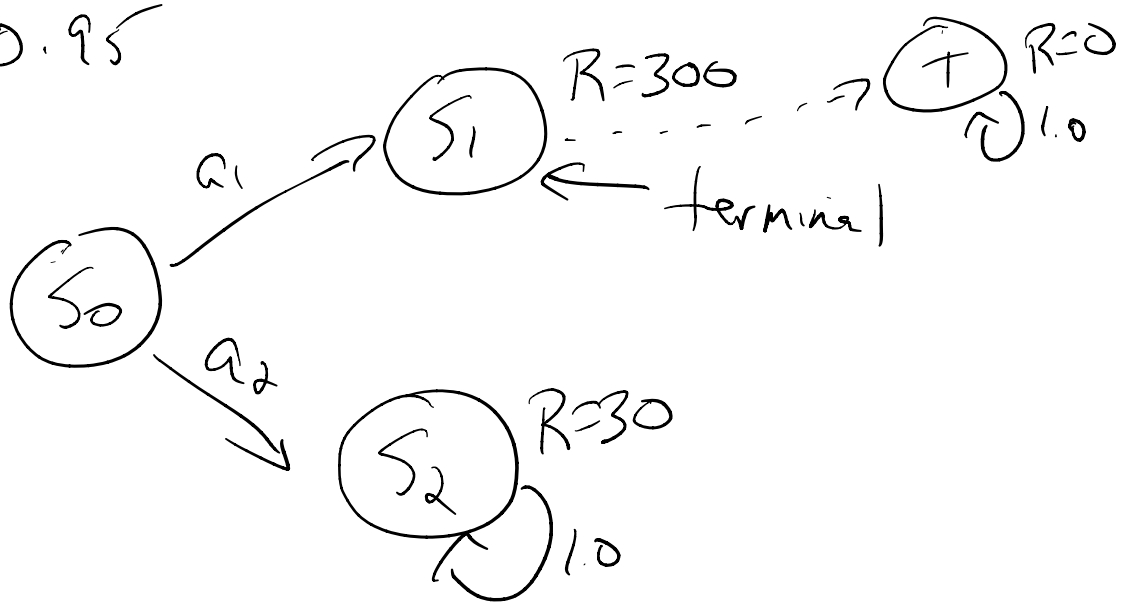
$300 one time payment

$30 payment every year in perpetuity

Choose now, payments start in 1 year

$\gamma = 0.95$



$$V(s) = R(s) + \gamma \max_a \sum_{s'} P(s'|s,a) V(s')$$

	S_0	S_1	S_2
V_0	0	300	30
V_1	$0.95(300)$	300	$30 + 0.95(30)$
V_2	$0.95(300)$	300	$30 + 0.95(30) + 0.95^2(30)$
V_3			

$$V_\infty(S_2) = \sum_{i=0}^{\infty} (0.95)^i 30 = 30 \sum_{i=0}^{\infty} 0.95 = \frac{30}{1-0.95} = 600$$

$$V(S_2) = 30 + 0.95 V(S_2) \quad \Big/ \quad V_\infty(S_0) = 0.95(600)$$