In. class
11/30

Initial state = 2

$\gamma = 0.8$

$$Q(s,a) = R(s,a) + \gamma \cdot \max[Q(s',a')]$$

$R(2,3) = 0$

$Q(s',a') = [Q(3,1), Q(3,2), Q(3,4)]$

$\max(Q(s',a')) = \max[80, 0, 0] = 80$

$\gamma \times \max(Q(s',a')) = 0.8 \times 80 = 64$

$Q(2,3) = 0 + 64 = 64$

$R(3,1) = 0$

$Q(s',a') = [Q(1,3), Q(1,5)]$

$\max(Q(s',a')) = \max[0, 100] = 100$

$\gamma \times \max(Q(s',a')) = 0.8 \times 100 = 80$

$Q(3,1) = 0 + 80 = 80$

$R(1,5) = 100$

$Q(s',a') = [Q(5,1), Q(5,4), Q(5,5)]$

$\max(Q(s',a')) = \max[0,0,0] = 0$

$Q(1,5) = 100 + 0 = 100$

$Q =$

	0	1	2	3	4	5
0	0	0	0	0	0	0
1	0	0	0	0	0	100
2	0	0	0	64	0	0
3	0	80	0	0	0	0
4	0	0	0	0	0	0
5	0	0	0	0	0	0