

## Exercise 7.1

a)

Since there is enough space, Car 3 performs an acceleration, that is possibly taken back due to randomization. For  $p = 0$ , the value for  $v_3$  in the next iteration is always 3, for  $p = 1$ , it is always 2 and for  $p = 0.25$  it is either of these two.

b)

		X $v_1=2$							X $v_2=5$				X $v_3=3$	X $v_4=0$	
					X $v_1=3$							X $v_2=3$	X $v_3=0$		X $v_4=1$