6 Vehicles approaching a certain road junction from town *A* can either turn left, turn right or go straight on. Over time it has been noted that of the vehicles approaching this particular junction from town *A*, 55% turn left, 15% turn right and 30% go straight on. The direction a vehicle takes at the junction is independent of the direction any other vehicle takes at the junction.

    (i) Find the probability that, of the next three vehicles approaching the junction from town *A*, one goes straight on and the other two either both turn left or both turn right. [4]

(ii) Three vehicles approach the junction from town A. Given that all three drivers choose the same direction at the junction, find the probability that they all go straight on. [4]