(a) Find the probability that in any randomly chosen 7-day period, more than 2 days have more than 10cm of rain. (b) For 3 randomly chosen 7-day periods, find the probability that exactly two of these periods have at least one day with more than 10 cm of rain. [3]

In a certain country, the probability of more than 10cm of rain on any particular day is 0.18,

independently of the weather on any other day.