1. During an annual beach-clean, the people doing the clean are asked to conduct a litter survey.
At a particular beach-clean, litter was found at a rate of 4 items per square metre.

(a) Find the probability that, in a randomly selected area of 2 square metres on this beach, exactly 5 items of litter were found.

(2)

Of the litter found on the beach, 30% of the items were face masks.

(b) Find the probability that, in a randomly selected area of 5 square metres on this beach, more than 4 face masks were found.

(2)

(c) Using a suitable approximation, find the probability that, in a randomly selected area of 20 square metres on this beach, less than 60 items of litter were found that were **not** face masks.

(4)

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

Question 1 continued

(Total for Question 1 is 8 marks)