1 A boat company organises a trip to see whales each day.
   The company advertises that customers see whales on 80% of its trips.
   Throughout the year, Ali goes on 10 of these trips on randomly chosen days.

(a) Suggest a suitable distribution to model the number of trips where Ali sees whales.

(1)

(b) Using this model, find the probability that Ali sees whales on

   (i) exactly 8 of the trips,
   (ii) at least 7 of the trips.

(3)

Sam really wants to see whales, so goes on a trip each day for 10 consecutive days.

(c) State a limitation of using the model in part (a) to represent the number of trips where Sam sees whales.

(1)