1: A golf club has 360 members. The captain of the golf club needs to select 20 players from the club to play in a charity tournament.

The 360 members of the golf club are listed by their randomly allocated membership numbers.

The captain decides to use systematic sampling to select the 20 players.

(a) Give a reason for using systematic sampling in this case.

(1)

The members are numbered from 001 to 360 and the 5th member on the list is randomly selected as the first player and then every xth member thereafter is selected.

(b) Write down the value of x

(1)

(c) Write down the probability that the sample includes both the 5th and the 6th member on the list.

(1)

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Question 1 continued

(Total for Question 1 is 3 marks)