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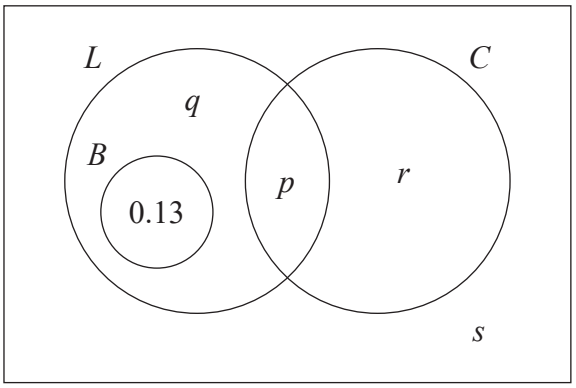
1. The Venn diagram shows the probability of a randomly selected student from a school being in the sets L, B and C, where

L represents the event that the student has instrumental music lessons

B represents the event that the student plays in the school band

C represents the event that the student sings in the school choir

p, q, r and s are probabilities.



(a) Select a pair of mutually exclusive events from L, B and C.

(1)

Given that $P(L) = 0.4$, $P(B) = 0.13$, $P(C) = 0.3$ and the events L and C are independent,

(b) find the value of p,

(2)

(c) find the value of q, the value of r and the value of s.

(3)

A student is selected at random from those who play in the school band or sing in the school choir.

(d) Find the exact probability that this student has instrumental music lessons.

(3)

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Question 1 continued

Q1

(Total 9 marks)