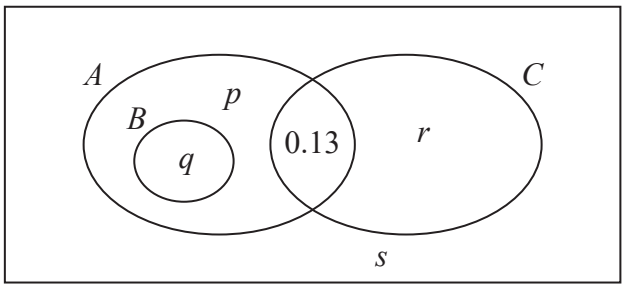
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2. In the Venn diagram below, A, B and C are events and p, q, r and s are probabilities.

The events A and C are independent and $P(A) = 0.65$



(a) State which two of the events A, B and C are mutually exclusive.

(1)

(b) Find the value of r and the value of s.

(5)

The events $(A \cap C')$ and $(B \cup C)$ are also independent.

(c) Find the exact value of p and the exact value of q. Give your answers as fractions.

(6)

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Question 2 continued

(Total 12 marks)

Q2