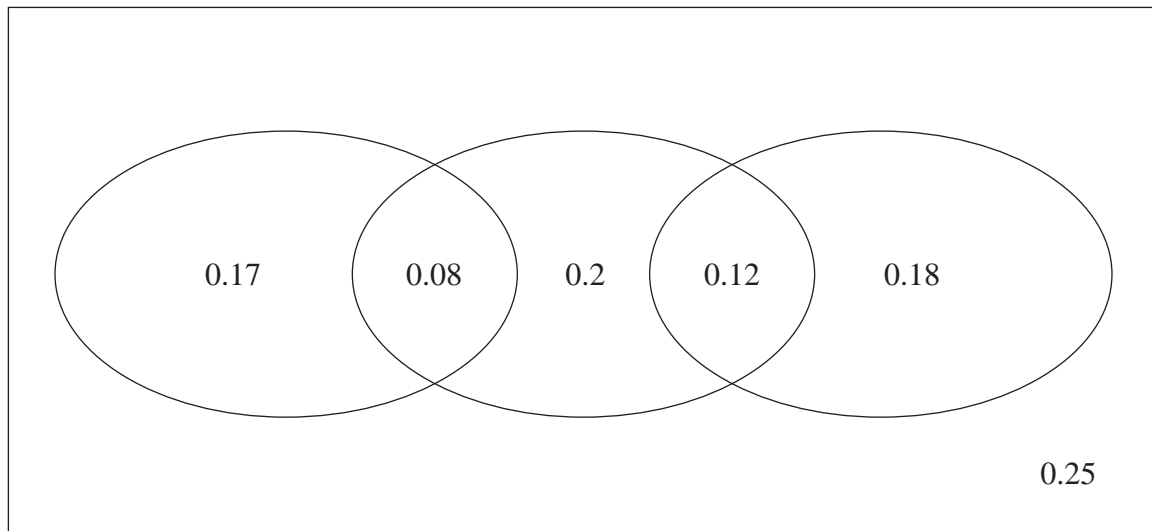


2. The Venn diagram shows three events and the probabilities associated with each region.

The labels for the three events are missing.



The three events shown by the Venn diagram are  $A$ ,  $B$  and  $C$ .

- Event  $A$  and event  $B$  are mutually exclusive
- Event  $A$  and event  $C$  are independent

- (a) Giving reasons and showing your working, complete the Venn diagram with the correct labels for  $A$ ,  $B$  and  $C$ .

**(4)**

- (b) Write down the probability of event  $B$  not occurring.

**(1)**