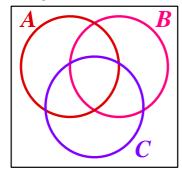
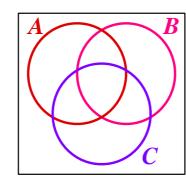
## A-Level Applied Mathematics : Statistics : Year 2 Set Theory and Probability II

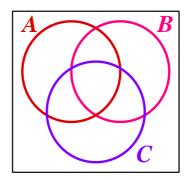
## **Question 1**



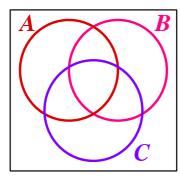
Shade: A



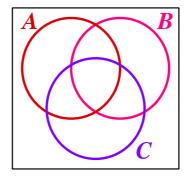
Shade:  $A \cap B$ 



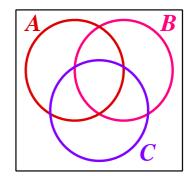
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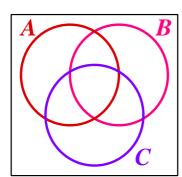
Shade:  $A \cup B \cup C$ 



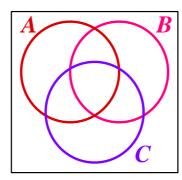
Shade:  $(A \cup B \cup C)'$ 



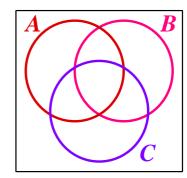
Shade: B'



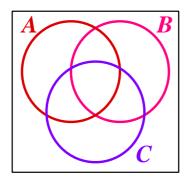
Shade:  $B \cap C'$ 



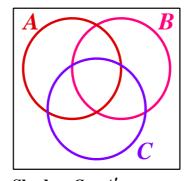
Shade:  $(B \cap C')'$ 



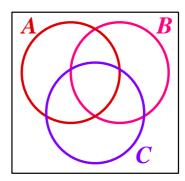
Shade :  $B \cup C$ 



Shade:  $(B \cup C)'$ 

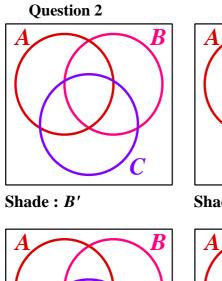


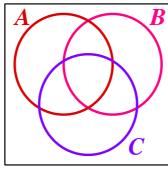
Shade :  $C \cap A'$ 

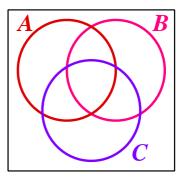


Shade:  $C \cup A'$ 

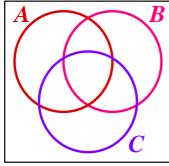
[ 12 marks ]

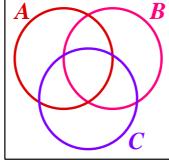


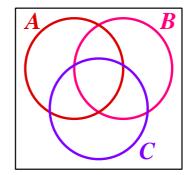




Shade:  $A \cap B'$  Shade:  $A \cup B'$ 



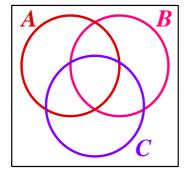


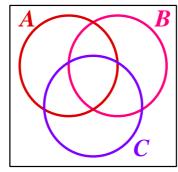


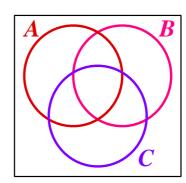
Shade :  $A \cup C$ 

Shade:  $(A \cup C)'$ 

Shade:  $A \cap B \cap C'$ 



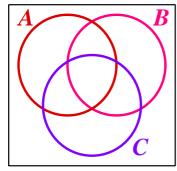


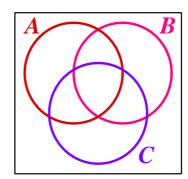


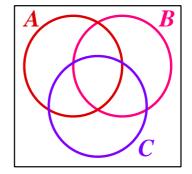
Shade :  $A \cap C$ 

Shade :  $(A \cap C)'$ 

Shade:  $B \cup B'$ 







Shade:  $A' \cup C'$ 

Shade :  $C \cap C$ 

Shade:  $C \cup A \cup B'$ 

[ 12 marks ]

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Teachers may obtain detailed worked solutions to the exercises by email from mhh@shrewsbury.org.uk