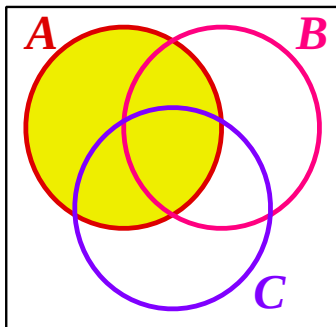
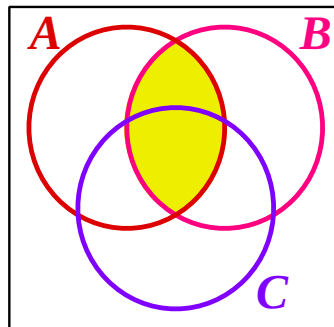


2.3 Answers

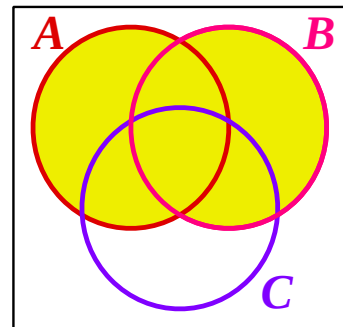
2.3.1 Solutions to 2.1 Starter



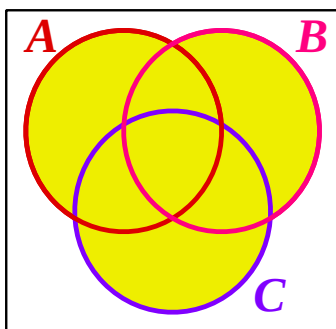
Shade : A



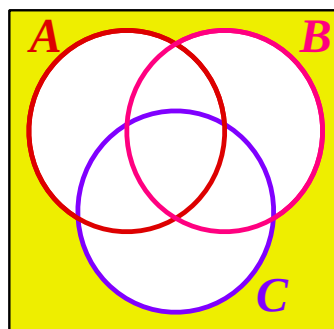
Shade : $A \cap B$



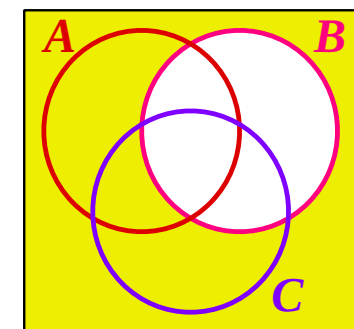
Shade : $A \cup B$



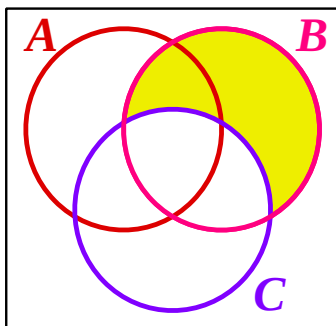
Shade : $A \cup B \cup C$



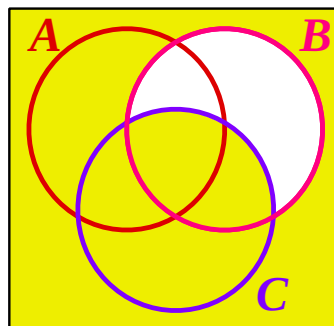
Shade : $(A \cup B \cup C)'$



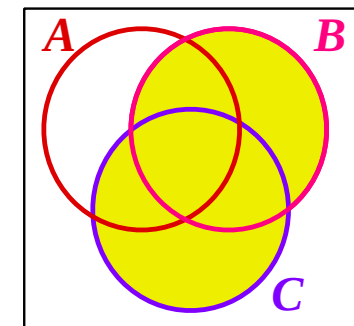
Shade : B'



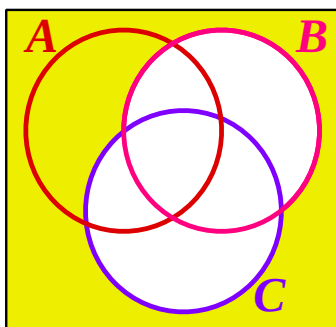
Shade : $B \cap C'$



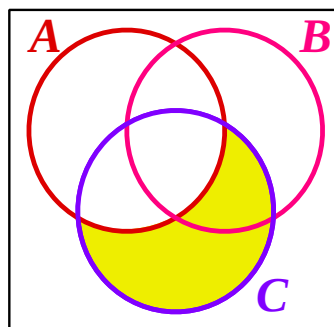
Shade : $(B \cap C')'$



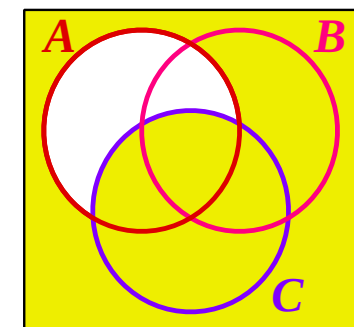
Shade : $B \cup C$



Shade : $(B \cup C)'$



Shade : $C \cap A'$



Shade : $C \cup A$

[12 marks]

2.3.2 Solutions to 2.2 Exercise

Answer 1

(i) $A \cup B = \{ 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, \dots \}$

[2 marks]

(ii) The odd numbers

[1 mark]

(iii) $A \cap B = \emptyset$

[1 mark]

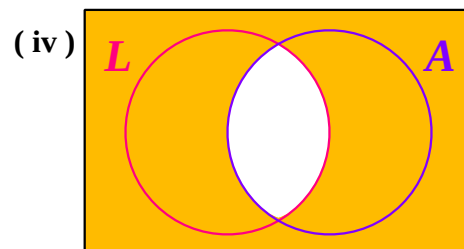
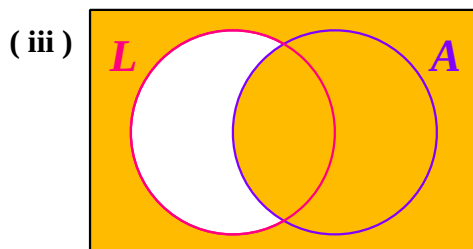
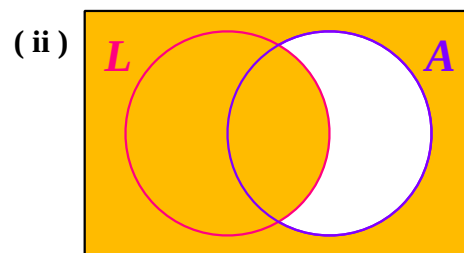
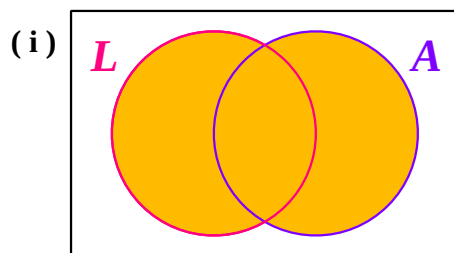
Answer 2

(i) $L \cup A$

(ii) $L \cup A'$

(iii) $L' \cup A$

(iv) $L' \cup A'$



[4 marks]

Answer 3

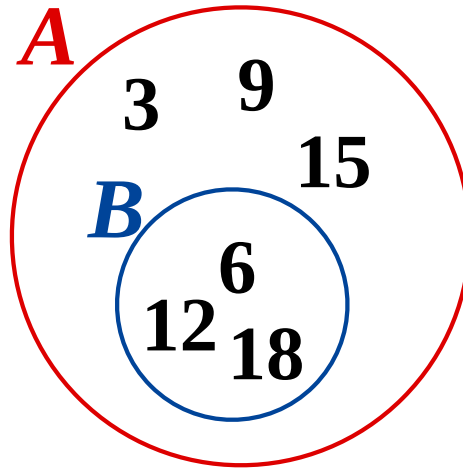
(i) $A = \{ 3, 6, 9, 12, 15, 18 \}$

[1 mark]

(ii) $B = \{ 6, 12, 18 \}$

[1 mark]

(iii)



[2 marks]

Answer 4

(i) $P \cap R = \{ \text{pink Rolls-Royce cars} \}$

[2 marks]

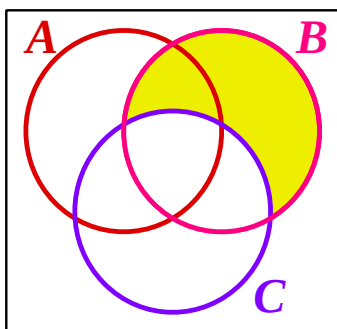
(ii) George is saying that there are no pink Rolls-Royce cars }



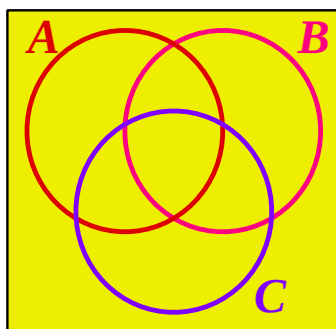
George isn't correct !

[2 marks]

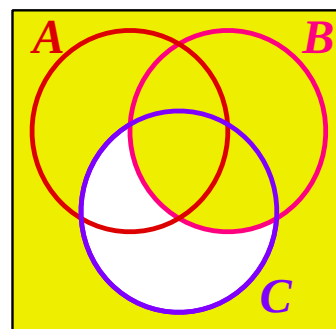
Answer 5



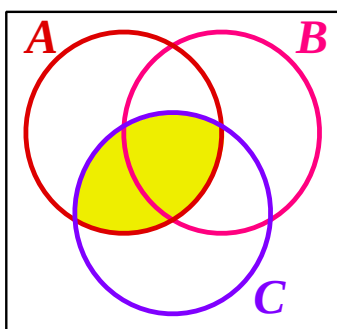
Shade : $B \cap C'$



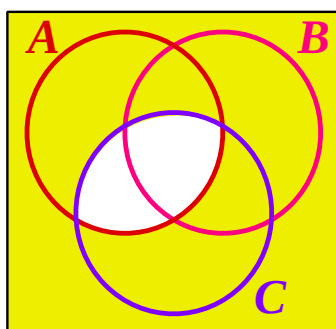
Shade : $B \cup B'$



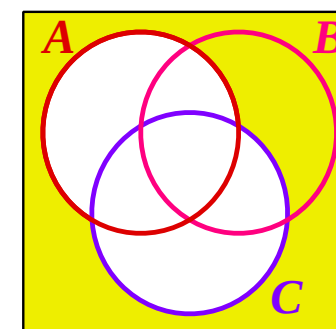
Shade : $B \cup C'$



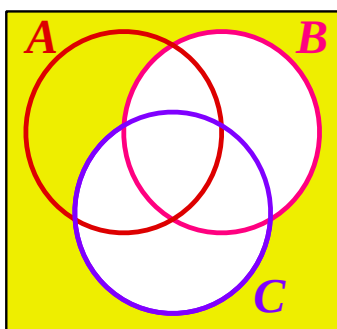
Shade : $A \cap C$



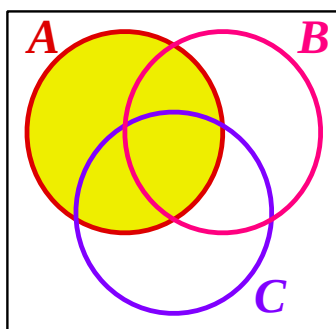
Shade : $(A \cap C)'$



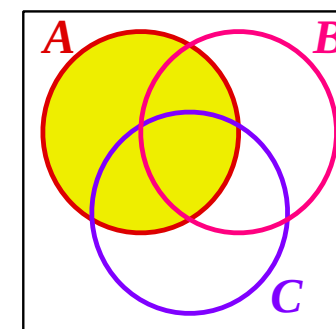
Shade : $(A \cup C)'$



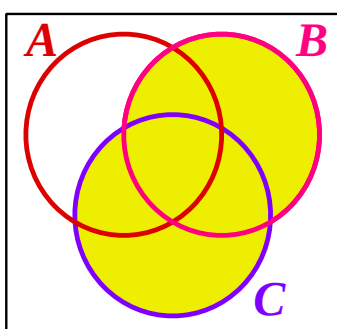
Shade : $B' \cap C'$



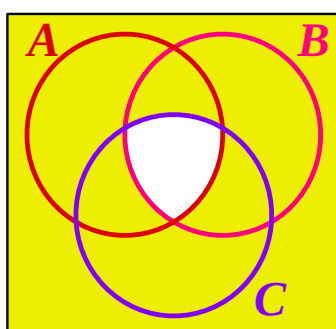
Shade : $A \cap A$



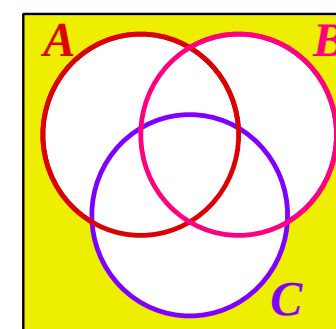
Shade : $A \cup A$



Shade : $B \cup C$



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



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

[12 marks]

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In October 2020, Shrewsbury School was voted "**Independent School of the Year 2020**"

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