

1.2 Set Notation & Venn Diagrams

Question Paper

Course	CIE IGCSE Maths
Section	1. Number
Topic	1.2 Set Notation & Venn Diagrams
Difficulty	Easy

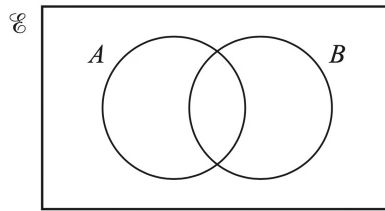
Time allowed: 20

Score: /16

Percentage: /100

Question 1

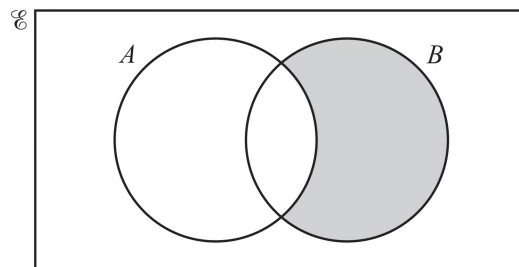
On the Venn diagram, shade the region $(A \cap B)'$.



[1]

[1 mark]

Question 2

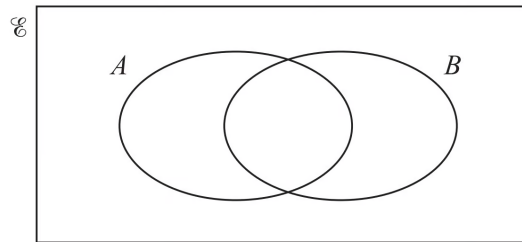


Use set notation to describe the shaded region.

[1]

[1 mark]

Question 3



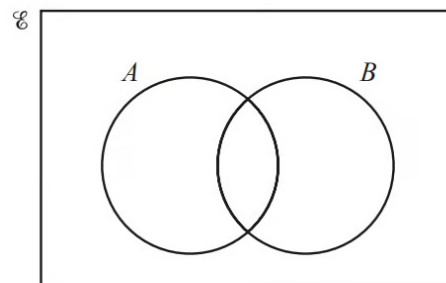
On the Venn diagram, shade the region $A \cap B$.

[1]

[1 mark]

Question 4

Shade the region $A' \cup B$ in the Venn diagram below.



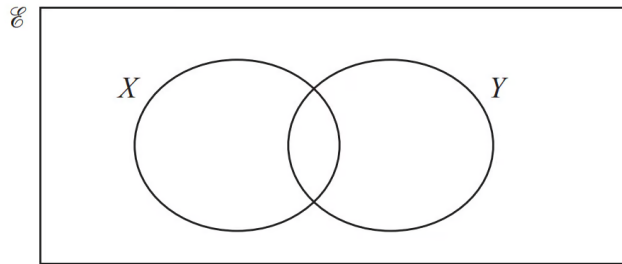
$A' \cup B$

[1]

[1 mark]

Question 5

In the Venn diagram, shade $X' \cap Y$.



[1]

[1 mark]

Question 6

$\mathcal{U} = \{20, 21, 22, 23, 24, 25, 26, 27, 28, 29\}$

$A = \{\text{odd numbers}\}$

$B = \{\text{multiples of 3}\}$

List the members of the set

i)

$A \cap B$

[1]

ii)

$A \cup B$

[1]

[2 marks]

Question 7a

$$\mathcal{E} = \{21, 22, 23, 24, 25, 26, 27, 28, 29, 30\}$$

$$A = \{22, 24, 26, 28, 30\}$$

$$B = \{21, 24, 27, 30\}$$

List the members of the set

i)

$$A \cap B$$

ii)

$$A'$$

[2]

[2 marks]

Question 7b

$$C = \{23, 25, 29\}$$

Using set notation, find an expression for C in terms of A and B .

[1]

[1 mark]

Question 8a $\mathcal{E} = \{\text{letters of the alphabet}\}$ $B = \{b, r, a, z, i, l\}$ $I = \{i, r, e, l, a, n, d\}$

List the members of the set

i)

 $B \cup I$

ii)

 $B \cap I'$

[2]

[2 marks]

Question 8b $K = \{k, e, n, y, a\}$ Cody writes down the statement $B \cap K = \emptyset$

Cody's statement is wrong.

Explain why.

[1]

[1 mark]

Question 9a

$$B = \{b, l, u, e\}$$

$$G = \{g, r, e, y\}$$

$$W = \{w, h, i, t, e\}$$

List all the members of the set

i)

$$B \cup G$$

ii)

$$W \cap G'$$

[2]

[2 marks]

Question 9b

Serena writes down the statement $B \cap G \cap W = \emptyset$

Is Serena's statement correct?

You must give a reason for your answer.

[1]

[1 mark]