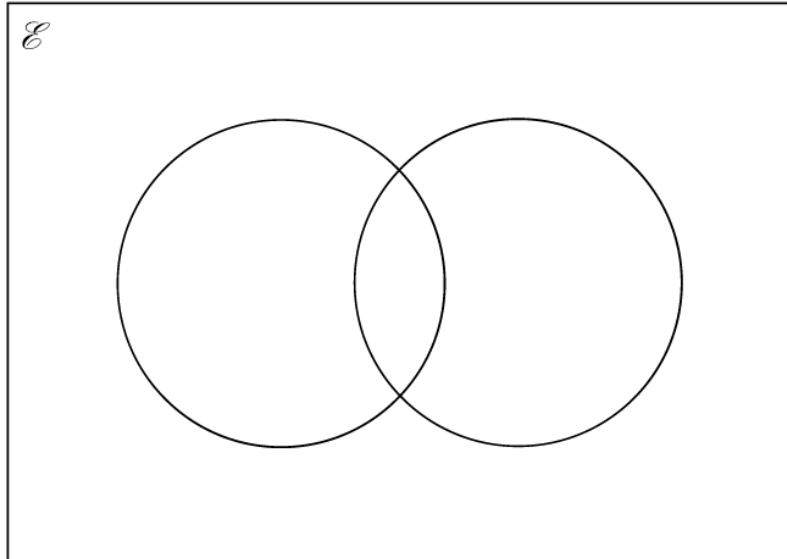


- 1  $\mathcal{E} = \{1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13\}$   
 $A = \{\text{multiples of 3}\}$   
 $B = \{\text{even numbers}\}$

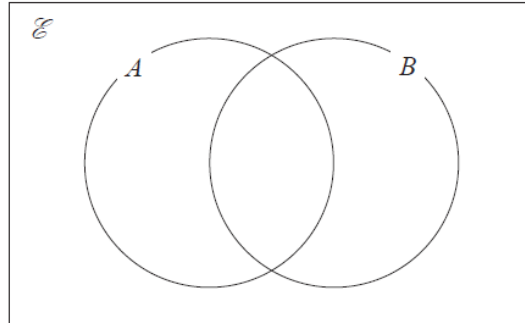
Complete the Venn diagram for this information.



(Total for Question is 4 marks)

- 2  $\mathcal{E} = \{1, 2, 3, 4, 5, 6, 7, 8, 9, 10\}$   
 $A = \{\text{even numbers}\}$   
 $B = \{\text{factors of } 10\}$

(a) Complete the Venn diagram for this information.



(3)

A number is chosen at random from the universal set,  $\mathcal{E}$

(b) Find the probability that this number is in the set  $A \cap B$

.....  
(2)

**(Total for Question is 5 marks)**