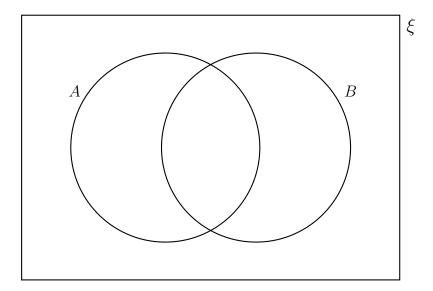
1. $\xi = \{1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12\}$

$$A\cap B=\{12\}$$

$$A \cup B = \{4, 6, 8, 12\}$$

$$B = \{6, 12\}$$

Complete this Venn diagram for this information.



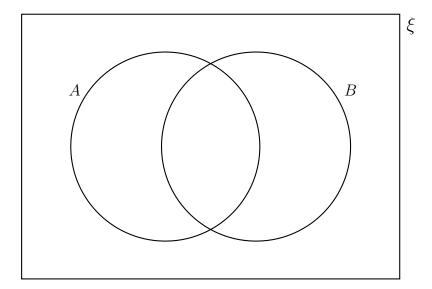
 $2. \ \xi = \{1,\, 2,\, 3,\, 4,\, 5,\, 6,\, 7,\, 8,\, 9,\, 10\}$

$$A = \{2, 4, 6, 8, 10\}$$

$$A\cap B=\{4\}$$

$$A \cup B = \{1,\, 2,\, 4,\, 6,\, 8,\, 9,\, 10\}$$

Complete this Venn diagram for this information.



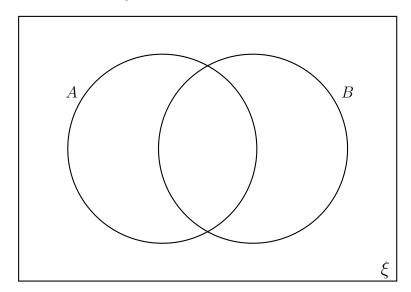
3. $\xi = \{1, 2, 3, 4, 5, 6, 7, 8, 9, 10\}$

$$A=\{2,\,3,\,5,\,7\}$$

$$A \cap B = \{3\}$$

$$A \cup B = \{1, 2, 3, 5, 7, 9\}$$

Complete this Venn diagram for this information.



Answers

1.
$$A \cap B' = \{4, 8\}$$

 $A \cap B = \{12\}$
 $A' \cap B = \{6\}$
 $A' \cap B' = \{1, 2, 3, 5, 7, 9, 10, 11\}$
2. $A \cap B' = \{2, 6, 8, 10\}$
 $A \cap B = \{4\}$
 $A' \cap B = \{1, 9\}$
 $A' \cap B' = \{3, 5, 7\}$
3. $A \cap B' = \{2, 5, 7\}$
 $A \cap B = \{3\}$
 $A' \cap B = \{1, 9\}$
 $A' \cap B' = \{4, 6, 8, 10\}$