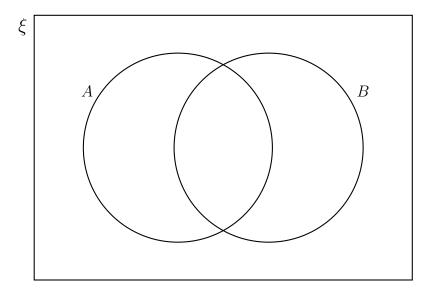
1. $\xi = \{\text{bird, blue, cat, rabbit, red, room, thick, thin}\}$

 $A = \{ \text{bird, cat, rabbit, room} \}$

 $B = \{ \text{bird, blue, room, thin} \}$

Complete this Venn diagram for this information.

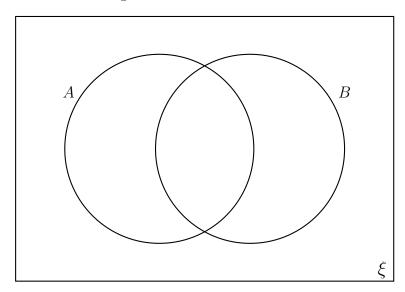


2. $\xi = \{1, 2, 3, 4, 5, 6, 7, 8, 9, 10\}$

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

$$B = \{1, 4, 9\}$$

Complete this Venn diagram for this information.

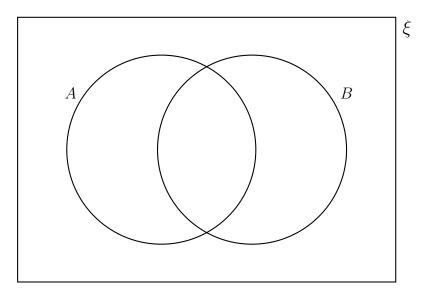


3. $\xi = \{ \blacktriangle, \triangle, \blacklozenge, \blacksquare, \bigcirc, \heartsuit, \clubsuit, \spadesuit, \diamondsuit \}$

$$A=\{\clubsuit, \spadesuit, \blacktriangle,\}$$

$$B = \{\blacktriangle, \triangle, \diamondsuit, \blacklozenge, \blacksquare\}$$

Complete this Venn diagram for this information.



1. Ans

$$A \cap B' = \{ \mathbf{cat}, \ \mathbf{rabbit} \}$$

 $A \cap B = \{ \mathbf{bird}, \ \mathbf{room} \}$
 $A' \cap B = \{ \mathbf{blue}, \ \mathbf{thin} \}$
 $A' \cap B' = \{ \mathbf{red}, \ \mathbf{thick} \}$

2. Ans

$$A \cap B' = \{3, 5, 7\}$$

$$A \cap B = \{1, 9\}$$

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

$$A' \cap B' = \{2, 6, 8, 10\}$$

3. Ans

$$A \cap B' = \{\clubsuit, \spadesuit\}$$

$$A \cap B = \{\blacktriangle, \blacklozenge, \blacksquare\}$$

$$A' \cap B = \{\diamondsuit, \triangle\}$$

$$A' \cap B' = \{\bigcirc, \heartsuit\}$$