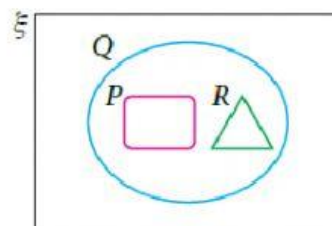1. Given that $\xi = \{$whole numbers which are less than $10\}$, $A = \{$factors of $18\}$ and ☐ $B = \{0, 4, 5, 7, 8\}$. With the help of a Venn diagram, determine whether $A' = B$. ☐

2. Based on the Venn diagram, state the relationship between
   (a) P ☐ Q,
   (b) Q ☐ R.

3. Given that $K = \{$perfect squares which are less than $20\}$,
   (a) write all the possible subsets of K.
   (b) if $L = \{1, 2, 3, ..., 20\}$, draw a Venn diagram to represent the relationship between K and L.

   Fill in every subset in ascending order

   (a) $\varnothing$, $\{$☐$\}$, $\{$☐$\}$, $\{$☐$\}$, $\{$☐$\}$, $\{$ 1 , ☐$\}$, $\{$ 1 , ☐$\}$, $\{$ 1 , ☐$\}$,
   $\{$ 4 , ☐$\}$, $\{$ 4 , ☐$\}$, $\{$ 9 , ☐$\}$, $\{$ 1 , ☐ , ☐$\}$,
   $\{$ 1 , ☐ , 16 $\}$, $\{$ 4 , ☐ , ☐$\}$, $\{$☐ , ☐ , ☐ , ☐$\}$

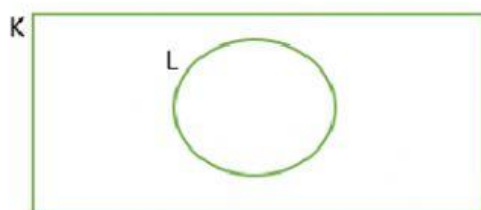   (b) Select the Venn diagram that represents the relationship between K and L. ☐
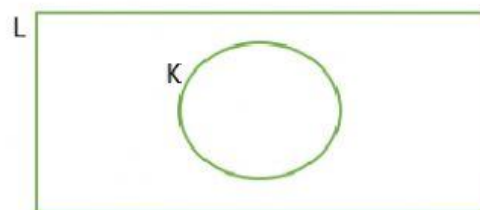
Diagram 1

Diagram 2

4. In a class, some of the girls wear spectacles while all of the boys do not wear spectacles. Sets ξ, P, Q and R are defined as follows:

   $\xi = \{$students in the class$\}$
   $P = \{$girls$\}$
   $Q = \{$boys$\}$
   $R = \{$students who wear spectacles$\}$

   Represent the relationship between sets ξ, P, Q and R, using a Venn diagram.

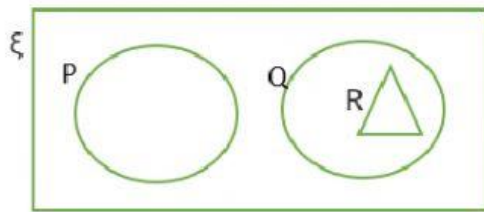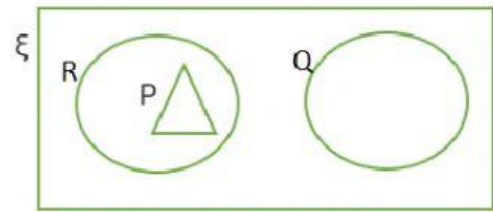Select the Venn diagram that represents the relationship in Question 4. [   ]
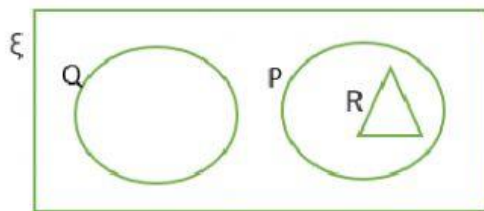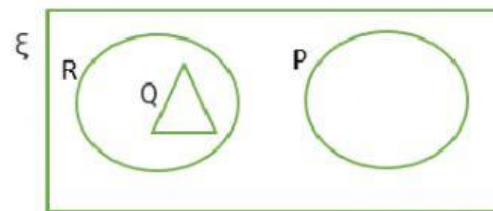

Diagram 1

Diagram 2

Diagram 3

Diagram 4

5.

Based on the Venn diagram, write the relationship between sets ξ, A, B and C.

C [ ] B [ ] A [ ] ξ

ξ [ ] A [ ] B [ ] C