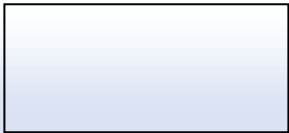
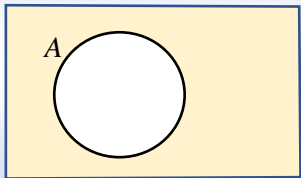
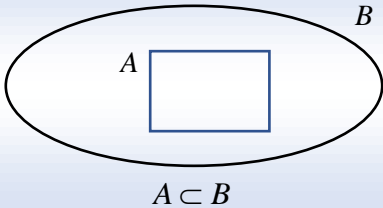


## 09. Set Set

Tingkatan Satu      Bab 11 : Pengenalan Set/ Introduction of set  
 Tingkatan Empat    Bab 4 : Operasi Set/ Operation on Set

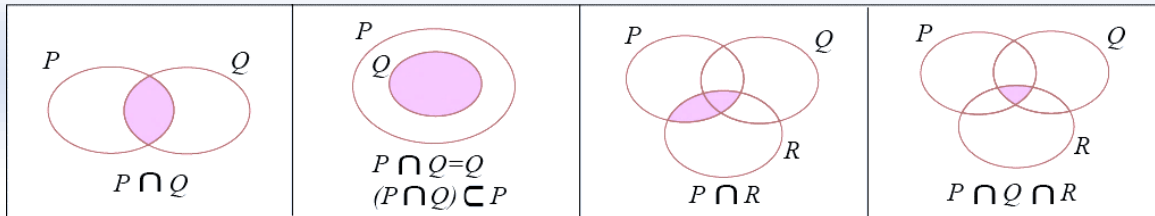
### NOTA RINGKAS

*Set ialah kumpulan objek-objek dengan setiap objek itu dikenali sebagai unsur.*  
*Set is a collection of objects where each object is known as an element.*

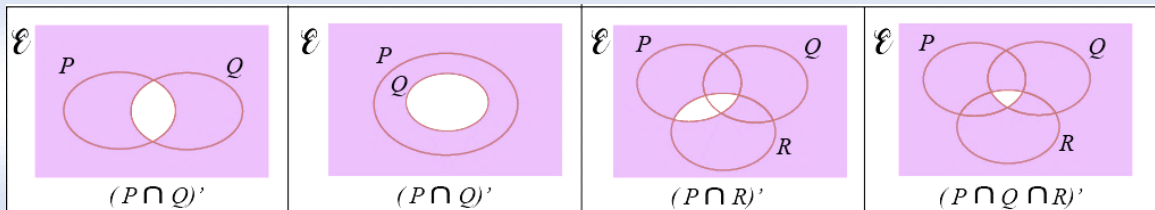
Simbol Symbol	Pengertian Meaning	Contoh Example
{ } atau/ or $\emptyset$	set kosong iaitu set yang tidak mengandungi sebarang unsur <i>Empty set that is set that does not contain any element.</i>	{nombor perdana di antara 31 dan 37} {prime numbers between 31 and 37}
$\in$ (epsilon)	ialah unsur bagi <i>is an element of</i>	$3 \in \{1,3,5, 7, 9\}$
$\notin$	bukan unsur bagi <i>not an element of</i>	$4 \notin \{1,3,5, 7, 9\}$
$n(A)$	bilangan unsur bagi A <i>number of elements of A</i>	$A = \{1,3,5, 7, 9\}$ $n(A)=5$
Set sama Equal set	mengandungi unsur-unsur yang sama. <i>contain the same elements</i>	Set A= {S, A, M, A} Set B= {M, A, S, A} Maka/ then $A=B$
Simbol symbol	Pengertian Meaning	Gambar rajah Venn. Venn diagram
$\xi$	Set semesta <i>Universal sets</i>	$\xi$ 
$A'$	Pelengkap A <i>Complement of A</i>	$\xi$ 
$\subset$	Subset <i>Subset</i>	 $A \subset B$

### Persilangan Set/Intersection of Sets

- Persilangan dua atau lebih set, set  $P$ , set  $Q$  dan set  $R$ ,  $(P \cap Q)$  atau  $(P \cap Q \cap R)$
- The intersection of two or more sets, set  $P$ , set  $Q$  and set  $R$ ,  $(P \cap Q)$  or  $(P \cap Q \cap R)$

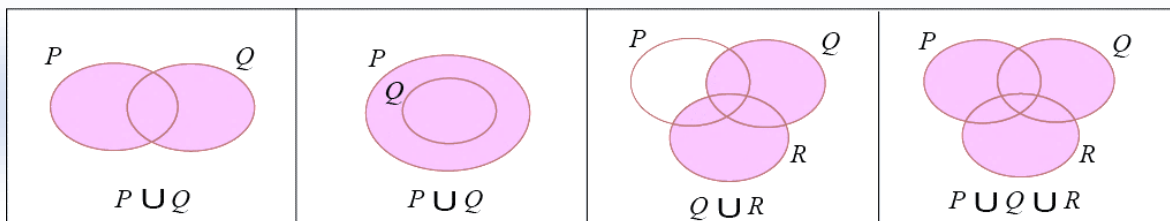


- Pelengkap bagi persilangan set, set  $P$ , set  $Q$  dan set  $R$ ,  $(P \cap Q)'$  atau  $(P \cap Q \cap R)'$
- The complement of the intersection of set, set  $P$ , set  $Q$  and set  $R$ ,  $(P \cap Q)'$  or  $(P \cap Q \cap R)'$



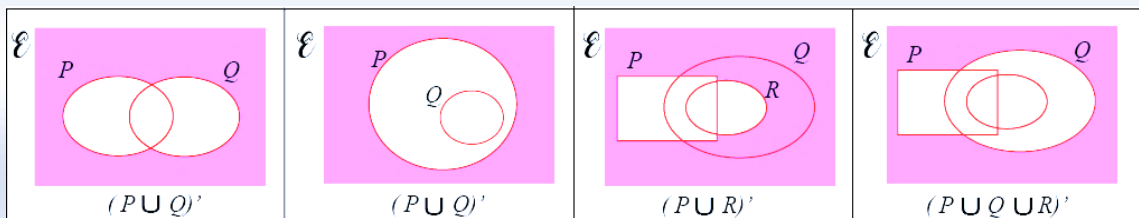
### Kesatuan Set/Union of Sets

- Kesatuan dua set atau lebih set, set  $P$ , set  $Q$  dan set  $R$ ,  $(P \cup Q)$  atau  $(P \cup Q \cup R)$
- The Union of two set or more sets, set  $P$ , set  $Q$  and set  $R$   $(P \cup Q)$  or  $(P \cup Q \cup R)$ .



- **Pelengkap** bagi kesatuan set  $P$ , set  $Q$  dan set  $R$ , diwakili oleh  $((P \cup Q)')$  atau  $(P \cup Q \cup R)'$
- The complement of the union of set  $P$ , set  $Q$  and set  $R$  represented by  $(P \cup Q)'$  or  $(P \cup Q \cup R)'$

### Gabungan Operasi Set/Combined Operations on Sets



- Gabungan operasi set yang melibatkan  $\cap$  dan  $\cup$  dilakukan dengan  
The combined operations or Sets involving  $\cap$  and  $\cup$  are performed by
  - ❖ memulakan operasi dalam tanda kurung terlebih dahulu.  
first starting the operation in the brackets.
  - ❖ memulakan operasi-operasi ikut tertib dari kiri ke kanan.  
starting with the operations in order from left to right.