

NAMA:

KELAS:

**ULANG-KAJI
BAB 4**

**Operations on Sets
Operasi Set**



PAPER 1

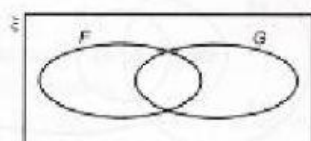
4.1

**Intersection of Sets
Persilangan Set**

TEXTBOOK
pg 94 - 105

- Given set $P = \{1, 3, 5, 7\}$ and set $Q = \{3, 5, 7, 9\}$. State the elements of set $P \cap Q$. **PL1**
Diberi set $P = \{1, 3, 5, 7\}$ dan set $Q = \{3, 5, 7, 9\}$. Nyatakan unsur bagi set $P \cap Q$.
A $\{1, 9\}$
B $\{1, 3, 5\}$
C $\{3, 5, 7\}$
D $\{1, 3, 5, 7\}$

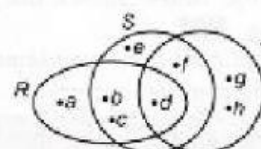
- The Venn diagram below shows the universal set $\xi = \{\text{all members of the Computer Club}\}$, set $F = \{\text{members who play basketball}\}$ and set $G = \{\text{members who play rugby}\}$. **PL2**
Gambar rajah Venn di bawah menunjukkan set semesta $\xi = \{\text{semua ahli Kelab Komputer}\}$, set $F = \{\text{ahli yang bermain bola keranjang}\}$ dan set $G = \{\text{ahli yang bermain ragbi}\}$.



Given that $n(F) = 18$, $n(G) = 14$, $n(F \cap G) = 6$ and the number of members who do not play both games is 15, find the total number of members in the Computer Club.
Diberi $n(F) = 18$, $n(G) = 14$, $n(F \cap G) = 6$ dan bilangan ahli yang tidak bermain kedua-dua sukan ialah 15, cari jumlah bilangan ahli dalam Kelab Komputer.

- A 23 C 41
B 38 D 53

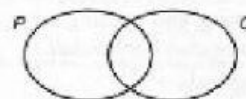
3.



The Venn diagram above shows the relationship between sets R , S and T . Find $n(R \cap S \cap T)$.
Gambar rajah Venn di atas menunjukkan hubungan antara set R , S dan T . Cari $n(R \cap S \cap T)$. **PL2**

- A 1 C 4
B 3 D 5

4.

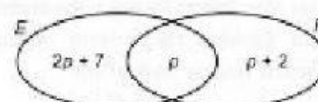


The Venn diagram above shows set P and set Q . Given that $n(P) = 86$, $n(Q) = 97$ and $n(P \cap Q) = 38$, find $n(\xi)$. **PL2**

Gambar rajah Venn di atas menunjukkan set P dan set Q . Diberi bahawa $n(P) = 86$, $n(Q) = 97$ dan $n(P \cap Q) = 38$, cari $n(\xi)$.

- A 124 C 183
B 145 D 221

5.



The diagram above shows the number of elements of sets E , F and universal set $\xi = E \cup F$. Given $n(E \cap F)' = 27$, find the value of p . **PL3**
Rajah di atas menunjukkan bilangan unsur bagi set E dan set F dan set semesta $\xi = E \cup F$. Diberi $n(E \cap F)' = 27$, cari nilai bagi p .

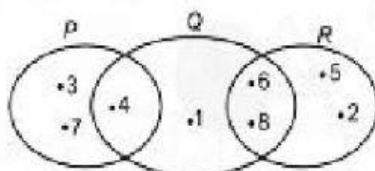
- A 8 C 7
B 6 D 9

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6. Given set $P = \{\text{multiples of 3 less than 20}\}$ and set $Q = \{\text{odd numbers less than 20}\}$. Find the number of elements in the set $P \cup Q$. **PL1**
 Diberi set $P = \{\text{gandaan 3 kurang daripada 20}\}$ dan set $Q = \{\text{nombor ganjil kurang daripada 20}\}$. Cari bilangan unsur bagi set $P \cup Q$.

- A 10
 B 13
 C 15
 D 16

7.



The Venn diagram above shows the sets P , Q and R . If the universal set $\xi = P \cup Q \cup R$, what is the elements of set $P \cup Q$? **PL1**

Gambar rajah Venn di atas menunjukkan set P , Q dan R . Jika set semesta $\xi = P \cup Q \cup R$, apakah unsur bagi set $P \cup Q$?

- A {4}
 B {1, 3, 4, 7}
 C {1, 3, 4, 6, 7, 8}
 D {1, 2, 3, 4, 5, 6, 7, 8}

8. Given the universal set, **PL3**

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Diberi set semesta,

$$\xi = \{x : 25 \leq x \leq 40, x \text{ is an integer}\},$$

$$\xi = \{x : 25 \leq x \leq 40, x \text{ ialah integer}\},$$

set $M = \{x : x \text{ is a multiple of 3}\}$ and

set $M = \{x : x \text{ ialah gandaan 3}\}$ dan

set $N = \{x : x \text{ is an even number}\}$.

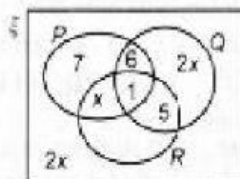
set $N = \{x : x \text{ ialah nombor genap}\}.$

State the element of $(M \cup N)'$.

Nyatakan unsur bagi $(M \cup N)'$.

- A {25, 31, 35, 37}
 B {25, 29, 31, 35, 37}
 C {29, 30, 31, 35, 38}
 D {25, 29, 30, 31, 35, 37}

9.



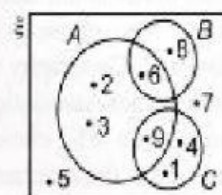
Given $n(Q) = n(P \cup R)'$, what is the value of x ?

Diberi $n(Q) = n(P \cup R)'$, apakah nilai bagi x ?

- A 5
 B 6
 C 7
 D 8

PL3

10.



The Venn diagram above shows the universal set ξ , sets A , B and C . What are the elements of set $B \cup C$? **PL3**

Gambar rajah Venn di atas menunjukkan set semesta ξ , set A , B dan C . Apakah unsur-unsur bagi set $B \cup C$?

- A {2, 3, 6, 8}
 B {2, 3, 6, 8, 9}
 C {2, 3, 5, 7, 8}
 D {2, 3, 5, 6, 7, 8}

11.



The Venn diagram above shows the set J and set K . Which of the following sets represents the shaded region? **PL3**

Gambar rajah Venn di atas menunjukkan set J dan set K . Antara berikut, set yang manakah mewakili rantau berlorek?

- A $J \cup K$
 B $J \cup K'$
 C $J' \cup K$
 D $J' \cup K'$

