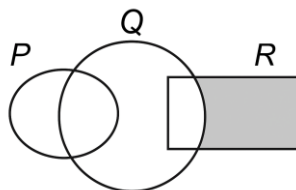




Zon RST Bab 4

Aras Rendah R

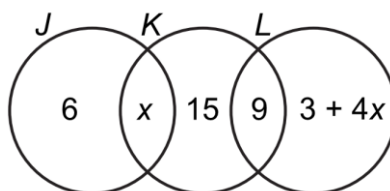
1. Gambar rajah Venn di bawah menunjukkan set P , set Q dan set R dengan keadaan set semesta, $\xi = P \cup Q \cup R$.
The Venn diagram below shows sets P , Q and R such that the universal set, $\xi = P \cup Q \cup R$.



Antara berikut, set yang manakah mewakili rantau yang berlorek?

Which of the following sets represents the shaded region?

- A $(P \cup Q)' \cap R$
B $(P \cap Q)' \cap R$
C $(P \cup R)' \cap Q$
D $(P \cap R) \cup Q'$
2. Diberi set semesta, $\xi = \{x : x \text{ ialah integer, } 1 \leq x \leq 30\}$, set $A = \{x : x \text{ ialah gandaan } 3\}$ dan set $B = \{x : x \text{ ialah faktor bagi } 36\}$. Cari $n(A \cap B)'$.
Given the universal set, $\xi = \{x : x \text{ is an integer, } 1 \leq x \leq 30\}$, set $A = \{x : x \text{ is a multiple of } 3\}$ and set $B = \{x : x \text{ is a factor of } 36\}$. Find $n(A \cap B)'$.
- A 23
B 24
C 25
D 26
3. Gambar rajah Venn di bawah menunjukkan bilangan unsur dalam set J , set K dan set L dengan keadaan set semesta, $\xi = J \cup K \cup L$.
The Venn diagram below shows the number of elements in sets J , K and L such that the universal set, $\xi = J \cup K \cup L$.



Diberi $n(J \cup K) = n(L)$. Cari nilai x .

Given $n(J \cup K) = n(L)$. Find the value of x .

- A 2
B 4
C 6
D 8



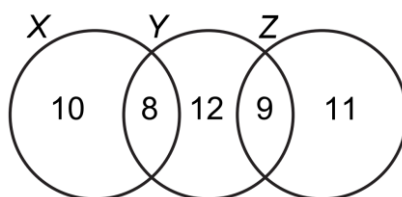
4. Suatu tinjauan ke atas 60 orang murid menunjukkan bahawa 35 orang menyukai teh dan 29 orang menyukai kopi. Terdapat 7 orang murid yang tidak menyukai kedua-dua minuman tersebut. Cari bilangan murid yang menyukai kedua-duanya.

A survey of 60 students found that 35 like tea and 29 like coffee. There 7 students who like neither drink. Find the number of students who like both.

- A 4
B 11
C 18
D 24

5. Gambar rajah Venn di bawah menunjukkan bilangan unsur dalam set X , set Y dan set Z dengan keadaan set semesta, $\xi = X \cup Y \cup Z$.

The Venn diagram below shows the number of elements in sets X , Y and Z such that the universal set, $\xi = X \cup Y \cup Z$.



Cari $n(X \cup Y')$.

Find $n(X \cup Y')$.

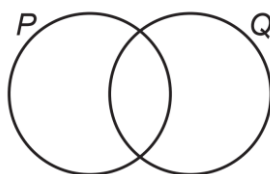
- A 18
B 21
C 29
D 32

Aras Sederhana



6. Gambar rajah Venn di bawah menunjukkan set P dan set Q dengan keadaan set semesta, $\xi = P \cup Q$.

The Venn diagram below shows sets P and Q such that the universal set, $\xi = P \cup Q$.



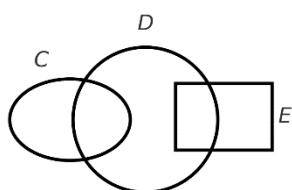
Diberi $n(P) = 25$, $n(Q) = 30$ dan $n(P \cup Q) = 40$. Cari $n(Q')$.

Given $n(P) = 25$, $n(Q) = 30$ and $n(P \cup Q) = 40$. Find $n(Q')$.

7. Gambar rajah Venn di bawah menunjukkan set C , set D dan set E dengan keadaan set semesta, $\xi = C \cup D \cup E$. Pada rajah di ruang jawapan, lorek set

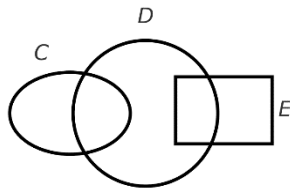
The Venn diagram below shows sets C , D and E such that the universal set, $\xi = C \cup D \cup E$. In the diagram in the answer space, shade the set

- (a) $C \cap D$





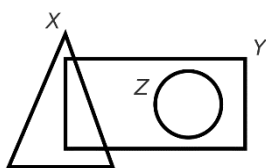
(b) $E \cap (D' \cup C)$



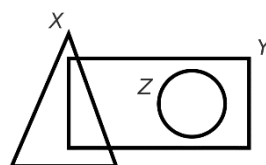
8. Gambar rajah Venn di bawah menunjukkan set X , set Y dan set Z dengan keadaan set semesta, $\xi = X \cup Y \cup Z$. Pada rajah di ruang jawapan, lorek set

The Venn diagram below shows sets X , Y and Z such that the universal set, $\xi = X \cup Y \cup Z$. In the diagram in the answer space, shade the set

(a) $X \cap Y'$



(b) $X' \cap (Y \cup Z)$

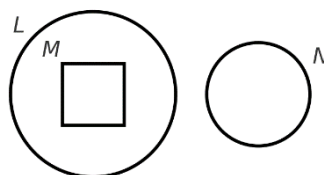


Aras Tinggi



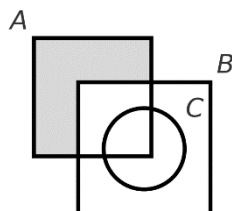
9. (a) Gambar rajah Venn di bawah menunjukkan set L , set M dan set N dengan keadaan set semesta, $\xi = L \cup M \cup N$. Pada rajah di ruang jawapan, lorek set $(L \cap M') \cup N$.

The Venn diagram below shows sets L , M and N such that the universal set, $\xi = L \cup M \cup N$. In the diagram in the answer space, shade the set $(L \cap M') \cup N$.



- (b) Rajah di bawah menunjukkan gambar rajah Venn dengan keadaan set semesta, $\xi = A \cup B \cup C$.

The diagram below shows a Venn diagram such that the universal set, $\xi = A \cup B \cup C$.



Selain set C' , apakah set lain yang diwakili oleh rantau yang berlorek?

Besides set C' , what other set is represented by the shaded region?

10. Dalam satu program pengakap, 64 orang ahli menyertai aktiviti Kembara Hutan, 59 orang menyertai Pertolongan Cemas dan 61 orang menyertai Masakan Rimba. Bilangan ahli yang menyertai kedua-dua Kembara Hutan dan Pertolongan Cemas ialah 21 orang, kedua-dua Kembara Hutan dan Masakan Rimba ialah 24 orang dan kedua-dua Pertolongan Cemas dan Masakan Rimba ialah 18 orang. Terdapat 11 orang ahli yang menyertai ketiga-tiga aktiviti tersebut.

In a scouting programme, 64 members joined Hiking, 59 joined First Aid and 61 joined Camp Cooking. The number of members who joined both Hiking and First Aid is 21, both Hiking and Camp Cooking is 24 and both First Aid and Camp Cooking is 18. There are 11 members who joined all three activities.

- (a) Lukis gambar rajah Venn untuk mewakili maklumat tersebut.

Draw a Venn diagram to represent the information.

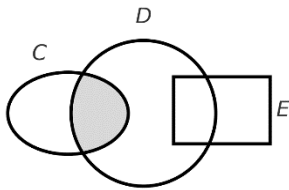
- (b) Cari bilangan ahli yang menyertai

Find the number of members who joined

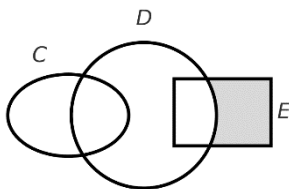
- (i) Kembara Hutan sahaja/ *Hiking only*,
- (ii) Pertolongan Cemas sahaja/ *First Aid only*,
- (iii) Masakan Rimba sahaja/ *Camp Cooking only*.

Jawapan

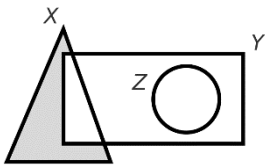
1. A
2. C
3. C
4. B
5. C
6. 10
7. (a)



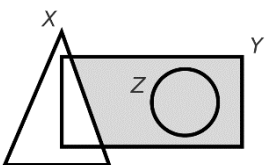
(b)



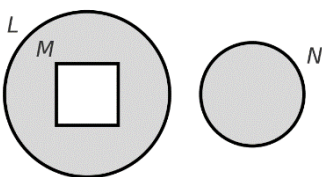
8. (a)



(b)



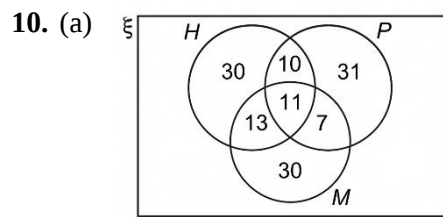
9. (a)



(b) $(B \cup C)' \cap A$

(Mana-mana jawapan yang betul diterima.)

(Any correct answers are acceptable.)



- (b) (i) 30
(ii) 31
(iii) 30