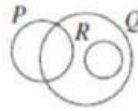


1. The Venn diagram showing the relationship between sets P , Q and R .
Gambar rajah Venn di bawah menunjukkan hubungan antara set P , set Q dengan set R .



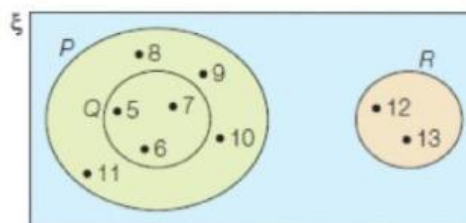
Which of the following is true?
Antara berikut, yang manakah benar?

- ☐ A $P \subset Q$
- ☐ B $Q \subset P$
- ☐ C $R \not\subset P$
- ☐ D $R \not\subset Q$

2. Given $P = \{x : x \text{ is a prime number and } 1 \leq x \leq 10\}$. Which of the following is **not** true?
Diberi $P = \{x : x \text{ ialah nombor perdana dan } 1 \leq x \leq 10\}$. Antara berikut, yang manakah **tidak** benar?

- ☐ A $1 \in P$
- ☐ B $2 \in P$
- ☐ C $5 \in P$
- ☐ D $7 \in P$

- 3.



State the set P .
Nyatakan set P .

- ☐ A $\{5, 6, 7\}$
- ☐ B $\{5, 6, 7, 8, 9, 10, 11\}$
- ☐ C $\{12, 13\}$
- ☐ D $\{5, 6, 7, 12, 13\}$

- 4.

$M = \{x : x \text{ is an integer and } 22 \leq x < 38\}$
 $M = \{x : x \text{ ialah integer dan } 22 \leq x < 38\}$

Which of the following is correct?
Antara berikut, yang manakah betul?

- ☐ A $22 \in M$
- ☐ B $40 \in M$
- ☐ C $20 \in M$
- ☐ D $42 \in M$

5. Which of the following is an empty set?
Antara berikut, yang manakah ialah set kosong?

- ☐ A P is a set of odd numbers which can be divided exactly by 3.
 P ialah set nombor ganjil yang boleh dibahagi tepat dengan 3.
- ☐ B $S = \{x: x \text{ is a mammal and } x \text{ is a bird}\}$
 $S = \{x: x \text{ ialah mamalia dan } x \text{ ialah burung}\}$
- ☐ C $Q = \{0\}$
- ☐ D $R = \{\text{factors of 4 and 16}\}$
 $R = \{\text{faktor bagi 4 dan 16}\}$

6. $K = \{\text{Vowels in the word 'MATEMATIK'}\}$
 $K = \{\text{Huruf vokal dalam perkataan 'MATEMATIK'}\}$

List the elements of K .
Senaraikan unsur K .

- ☐ A $\{A, E, I\}$
- ☐ B $\{A, M, I\}$
- ☐ C $\{M, T, K\}$
- ☐ D $\{M, I, K\}$

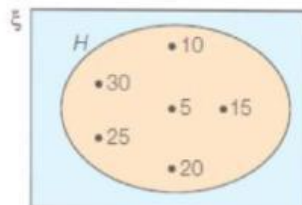
7. If set $P = \{a, b, c, d\}$, then the number of subsets of set P is
Jika set $P = \{a, b, c, d\}$, maka bilangan subset bagi set P ialah

- ☐ A 14
- ☐ B 15
- ☐ C 16
- ☐ D 17

8. List all the subsets of set $Y = \{p, q\}$.
Senaraikan semua subset bagi set $Y = \{p, q\}$.

- ☐ A $\{p\}, \{q\}$
- ☐ B $\{p\}, \{q\}, \{p, q\}$
- ☐ C $\{ \}, \{p\}, \{q\}$
- ☐ D $\{ \}, \{p\}, \{q\}, \{p, q\}$

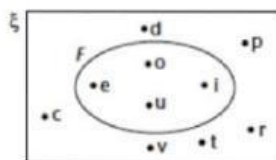
9. The Venn diagram shows the universal set, ξ and set H .
Gambarajah Venn di bawah menunjukkan set semesta, ξ dan set C .



State set ξ .
Nyatakan set ξ .

- ☐ A $\{10, 15, 20, 25, 30, 35\}$
- ☐ B $\{5, 10, 15, 20, 25, 30\}$
- ☐ C $\{5, 10, 15, 20, 25, 30, 35, 40\}$
- ☐ D Semua integer

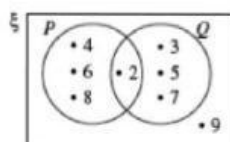
10. The Venn diagram shows the universal set, ξ and set F .
 Gambar rajah Venn di bawah menunjukkan set semesta, ξ dan set F .



List all the elements of F' .
 Senaraikan semua unsur bagi F' .

- ☐ A {e, i, o, u}
☐ B {c, d, p, r}
☐ C {c, d, p, r, t}
☐ D {c, d, p, r, t, v}

11. The Venn diagram shows the elements of the universal set, ξ , set P and set Q .
 Gambar rajah Venn di bawah menunjukkan unsur-unsur bagi set semesta, ξ , set P dan set Q .



Given that set R is the subset of set P , find the elements of set R .
 Diberi bahawa set R ialah subset bagi set P , cari unsur-unsur bagi set R .

- ☐ A {4, 8}
☐ B {3, 5, 7}
☐ C {2, 3, 5, 7}
☐ D {3, 5, 7, 9}

12. Given $\xi = \{x : x \text{ is an even number and } x \leq 20\}$ and $P = \{2, 4, 6, 8, 10\}$. State P' .
 Diberi bahawa $\xi = \{x : x \text{ ialah nombor genap dan } x \leq 20\}$ dan $P = \{2, 4, 6, 8, 10\}$. Nyatakan P' .

- ☐ A $P' = \{2, 4, 6, 8, 10, 12, 14, 16, 18, 20\}$
☐ B $P' = \{12, 14, 16, 18\}$
☐ C $P' = \{12, 14, 16, 18, 20\}$
☐ D $P' = \{12, 14, 16, 18, 20, 22, 24, 26\}$

13. $\xi = \{x : x \text{ is the common multiple of 2 and 7, and } x \leq 100\}$
 $\xi = \{x : x \text{ ialah gandaan sepunya bagi 2 dan 7, dan } x \leq 100\}$

$M = \{x : x \text{ is a two-digit number that the last digit is either 2 or 4}\}$
 $M = \{x : x \text{ ialah nombor dua digit yang digit akhirnya ialah 2 atau 4}\}$

State the set M' .
 Nyatakan set M' .

- ☐ A {28, 56, 70, 98}
☐ B {56, 70, 98}
☐ C {14, 42, 56, 70, 84, 98}
☐ D {14, 28, 42, 56, 70, 84, 98}

14. Given the universal set, $\xi = \{x : 20 \leq x \leq 30, x \text{ is an integer}\}$ and set $P = \{x : x \text{ is a number such that the sum of its digits is an odd number}\}$. Find the elements of set P' .
Diberi set semesta, $\xi = \{x : 20 \leq x \leq 30, x \text{ ialah integer}\}$ dan set $P = \{x : x \text{ ialah nombor dengan keadaan hasil tambah digit-digitnya ialah nombor ganjil}\}$. Cari unsur-unsur bagi set P' .

- ☐ A {20, 22, 24}
☐ B {21, 23, 25, 27}
☐ C {21, 23, 25, 27, 30}
☐ D {20, 22, 24, 26, 28}

15. Given set $J = \{5, 8, 14, 15, 19\}$. Which of the following is **not** the subset of set J ?
*Diberi set $J = \{5, 8, 14, 15, 19\}$. Antara berikut, yang manakah **bukan** subset bagi set J ?*

- ☐ A {5, 8, 14, 15, 19, 21}
☐ B {5}
☐ C {5, 19}
☐ D {}

16. Given set $X = \{b, c, e\}$, set $Y = \{b, d, e, f\}$ and set $Z = \{b, e, f\}$. Which of the following is true?
Diberi set $X = \{b, c, e\}$, set $Y = \{b, d, e, f\}$ dan set $Z = \{b, e, f\}$. Antara berikut, yang manakah benar?

- ☐ A $X \subset Y$
☐ B $Z \subset Y$
☐ C $Y \subset X$
☐ D $Z \subset X$

17. State the number of subsets of set $P = \{\text{letters in the word 'BIASA'}\}$.
Nyatakan bilangan subset dalam set $P = \{\text{huruf dalam perkataan 'BIASA'}\}$.

- ☐ A 4
☐ B 8
☐ C 16
☐ D 32

18. $T = \{x : x \text{ is an integer and } -5 < x < 5\}$
 $T = \{x : x \text{ ialah integer dan } -5 < x < 5\}$

Which of the following is **not** the element of T ?
*Antara berikut, yang manakah **bukan** unsur bagi T ?*

- ☐ A 4
☐ B 0
☐ C -11
☐ D -3

19. It is given that the universal set, $\xi = \{x : 10 \leq x \leq 30, x \text{ is an integer}\}$ and set $P = \{x : x \text{ is a prime number}\}$.
Find $n(P')$.
*Diberi bahawa set semesta, $\xi = \{x : 10 \leq x \leq 30, x \text{ ialah integer}\}$ dan set $P = \{x : x \text{ ialah nombor perdana}\}$.
Cari $n(P')$.*

- ☐ A 6
- ☐ B 15
- ☐ C 18
- ☐ D 21

20. 8 is an element of the following sets **except**
*8 ialah unsur bagi set yang berikut **kecuali***

- ☐ A $\{x : x \text{ is a factor of 2}\}$
 $\{x : x \text{ ialah faktor bagi 2}\}$
- ☐ B $\{x : x \text{ is a factor of 8}\}$
 $\{x : x \text{ ialah faktor bagi 8}\}$
- ☐ C $\{x : x \text{ is a multiple of 2}\}$
 $\{x : x \text{ ialah gandaan 2}\}$
- ☐ D $\{x : x \text{ is a multiple of 8}\}$
 $\{x : x \text{ ialah gandaan 8}\}$