

BAB 4: OPERASI SET

4.1

Persilangan Set Intersection of Sets

- 1 Diberi set semesta,
 $\xi = \{x: 1 \leq x \leq 10, x \text{ ialah integer}\}$,
set $P = \{x: x \text{ ialah nombor perdana}\}$ dan
set $Q = \{x: x \text{ ialah nombor ganjil}\}$.

Given the universal set,

$\xi = \{x: 1 \leq x \leq 10, x \text{ is integer}\}$,
set $P = \{x: x \text{ is prime number}\}$ and
set $Q = \{x: x \text{ is odd number}\}$.

- (a) Senaraikan unsur-unsur bagi $P \cap Q$.
List the elements of $P \cap Q$.

- 2 Diberi set semesta,
 $\xi = \{x: 1 \leq x \leq 10, x \text{ ialah integer}\}$,
set $P = \{x: x \text{ ialah faktor bagi } 6\}$ dan
set $Q = \{x: x \text{ ialah nombor genap}\}$.
Given the universal set,
 $\xi = \{x: 1 \leq x \leq 10, x \text{ is integer}\}$,
set $P = \{x: x \text{ is factor of } 6\}$ and
set $Q = \{x: x \text{ is even number}\}$.

- (a) Senaraikan unsur-unsur bagi $P \cap Q$.
List the elements of $P \cap Q$.

- 3 Diberi set semesta,
 $\xi = \{x: 2 \leq x \leq 8, x \text{ ialah integer}\}$,
set $P = \{x: x \text{ ialah gandaan bagi } 2\}$ dan
set $Q = \{x: x \text{ ialah nombor genap}\}$.
Given the universal set,
 $\xi = \{x: 2 \leq x \leq 8, x \text{ is integer}\}$,
set $P = \{x: x \text{ is multiple of } 2\}$ and
set $Q = \{x: x \text{ is even number}\}$.

- (a) Senaraikan unsur-unsur bagi $P \cap Q$.
List the elements of $P \cap Q$.

- 4 Diberi set semesta,
 $\xi = \{x: 1 \leq x \leq 10, x \text{ ialah integer}\}$,
set $P = \{x: x \text{ ialah nombor ganjil}\}$ dan
set $Q = \{x: x \text{ ialah nombor genap}\}$.
Given the universal set,
 $\xi = \{x: 1 \leq x \leq 10, x \text{ is integer}\}$,
set $P = \{x: x \text{ is odd number}\}$ and
set $Q = \{x: x \text{ is even number}\}$.

- (a) Senaraikan unsur-unsur bagi $P \cap Q$.
List the elements of $P \cap Q$.

5 Diberi set semesta,

$\xi = \{x: 1 \leq x \leq 12, x \text{ ialah integer}\}$,
set $P = \{x: x \text{ ialah faktor bagi } 12\}$,
set $Q = \{x: x \text{ ialah faktor bagi } 6\}$ dan
set $R = \{x: x \text{ ialah faktor bagi } 2\}$.

Given the universal set,

$\xi = \{x: 1 \leq x \leq 12, x \text{ is integer}\}$,
set $P = \{x: x \text{ is multiple of } 12\}$,
set $Q = \{x: x \text{ is factor of } 6\}$ and
set $R = \{x: x \text{ is factor of } 2\}$.

(a) Senaraikan unsur-unsur bagi $P \cap Q \cap R$.

List the elements of $P \cap Q \cap R$.

6 Diberi / Given $\xi = \{a, b, c, d, e, f, g, h, i, j, k\}$

$P = \{a, b, c, d\}$

$Q = \{e, f, g, h, i, j, k\}$

$R = \{a, b\}$

(a) Senaraikan unsur-unsur bagi $P \cap R$.

Seterusnya, nyatakan hubungan P dan R .

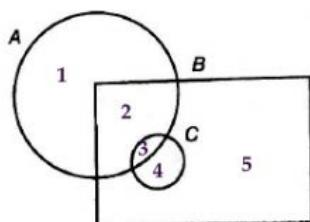
List the elements of $P \cap R$. Hence, state the relationship between P and R .

8 Gambar rajah Venn berikut menunjukkan set A , set B dan set C . Pada setiap gambar rajah, lorekkan

set $A \cap B \cap C$.

The following Venn diagrams show set A , set B and set C . Shade the region representing set $A \cap B \cap C$ on each diagram. (Nyatakan kawasan nombor yang berlorek sahaja)

(a)



(b)

