

BAB 4: OPERASI SET

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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)

