

Latihan 2 Cari persilangan antara set berikut.
Find the intersection of the following sets.

TP 2 Mempamerkan kefahaman tentang persilangan set, kesatuan set dan gabungan operasi set.



Contoh 2

(a) $P = \{2, 3, 4, 5\}$
 $Q = \{1, 3, 5, 7\}$

Penyelesaian
 $\therefore P \cap Q = \{3, 5\}$

(b) $P = \{f, a, t, h, e, r\}$
 $Q = \{m, o, t, h, e, r\}$

Penyelesaian
 $\therefore P \cap Q = \{t, h, e, r\}$

1 $A = \{2, 3, 6, 7, 9\}$ $B = \{1, 2, 4, 6, 7, 8\}$ $A \cap B =$	2 $C = \{m, a, t, c, h\}$ $D = \{a, c, e, s\}$ $C \cap D =$
3 $E = \{4, 6, 8, 10\}$ $F = \{2, 3, 5, 7, 9\}$ $E \cap F =$	4 $G = \{\text{nombor perdana/prime numbers}\}$ $H = \{1, 2, 3, 4, 5, 6\}$ $G \cap H =$
5 $P = \{1, 2, 4, 8\}$ $Q = \{1, 2, 3, 4, 6, 12\}$ $P \cap Q =$	6 $S = \{b, e, r, s, a, t, u\}$ $T = \{p, a, d, u\}$ $S \cap T =$

Latihan 3 Senaraikan semua unsur bagi persilangan antara set berikut. Seterusnya, nyatakan bilangan unsur dalam persilangan set-set itu.
List the elements of the following intersection of sets. Hence, state the number of elements of the intersection of sets.

TP 3 Mengaplikasikan kefahaman tentang persilangan set, kesatuan set dan gabungan operasi set untuk melaksanakan tugasan mudah.



Contoh 3

(a) $P = \{1, 2, 3, 4, 5, 6\}$
 $Q = \{2, 3, 5, 7\}$
 $R = \{1, 3, 5, 7, 9\}$

Penyelesaian
 $\therefore P \cap Q \cap R = \{3, 5\}$
 $n(P \cap Q \cap R) = 2$

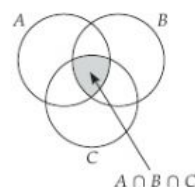
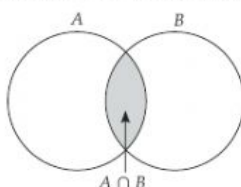
(b) $P = \{a, b, c, d, e, f\}$
 $Q = \{b, c, d, g, h\}$
 $R = \{c, d, e, h, k\}$

Penyelesaian
 $\therefore P \cap Q \cap R = \{c, d\}$
 $n(P \cap Q \cap R) = 2$

1 $A = \{1, 2, 5, 10\}$ $B = \{1, 2, 4\}$ $C = \{1, 2, 3, 6\}$ $A \cap B \cap C =$ $n(A \cap B \cap C) =$	2 $D = \{s, u, l, i, t\}$ $E = \{s, u, k, a\}$ $F = \{s, u, t, e, r, a\}$ $D \cap E \cap F =$ $n(D \cap E \cap F) =$
3 $G = \{10, 12, 14, 16\}$ $H = \{12, 13, 16, 17, 19\}$ $I = \{10, 12, 13, 14, 16\}$ $G \cap H \cap I =$ $n(G \cap H \cap I) =$	4 $J = \{\text{nombor nisbah/rational numbers}\}$ $K = \{0.5, 1, 1.5, 2, 2.5\}$ $L = \{0.5, 2, 2.5, 3.5\}$ $J \cap K \cap L =$ $n(J \cap K \cap L) =$
5 $P = \{1, 2, 4, 8\}$ $Q = \{1, 2, 3, 4, 6, 12\}$ $R = \{1, 2, 4, 8, 10\}$ $P \cap Q \cap R =$ $n(P \cap Q \cap R) =$	6 $S = \{b, e, r, s, a, t, u\}$ $T = \{p, a, d, u\}$ $U = \{t, e, g, u, h\}$ $S \cap T \cap U =$ $n(S \cap T \cap U) =$

Tip Bestari

Persilangan set boleh diwakilkan menggunakan gambar rajah Venn.
Intersection of sets can be represented by using Venn diagram.



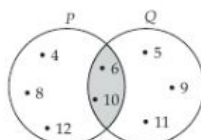
Latihan 4 Cari persilangan set-set yang berikut dan wakilkan persilangan set-set itu dengan menggunakan gambar rajah Venn.

Find the intersection of the following sets and represent the intersection of the sets using Venn diagram.

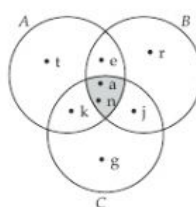
TP 4 Mengaplikasikan pengetahuan dan kemahiran yang sesuai tentang persilangan set, kesatuan set dan gabungan operasi set dalam konteks penyelesaian masalah rutin yang mudah.

Contoh 4

- (a) $P = \{4, 6, 8, 10, 12\}$
 $Q = \{5, 6, 9, 10, 11\}$
 $\therefore P \cap Q = \{6, 10\}$



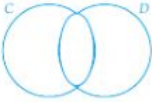
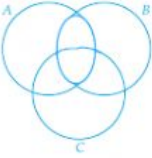
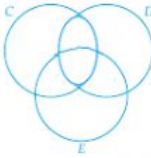
- (b) $A = \{t, e, k, a, n\}$
 $B = \{r, a, j, e, n\}$
 $C = \{j, a, n, g, k\}$
 $\therefore A \cap B \cap C = \{a, n\}$



- 1 $A = \{5, 7, 6, 10, 11\}$
 $B = \{6, 7, 9, 10, 12\}$

$$A \cap B =$$



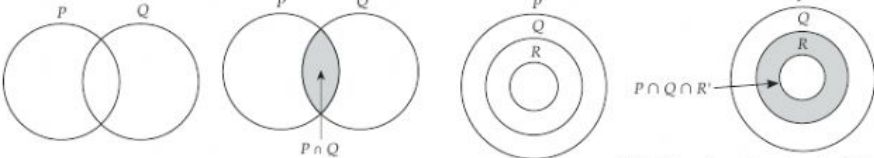
2 $C = \{q, n, e, t\}$ $D = \{p, q, r, s, t\}$ $C \cap D =$ 	3 $A = \{1, 3, 5, 7, 9\}$ $B = \{2, 5, 7, 8, 9\}$ $C = \{1, 5, 7, 8, 10\}$ $A \cap B \cap C =$ 	4 $C = \{m, a, t, h, s\}$ $D = \{m, a, k, e\}$ $E = \{h, a, p, e\}$ $C \cap D \cap E =$ 
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Latihan 5 Tandakan rantau yang mewakili persilangan antara set. Pilih nombor yang betul.
Mark the region that represents the intersection of the sets. Choose the right number.

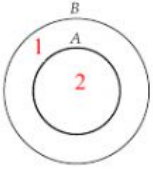
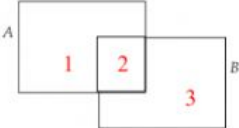
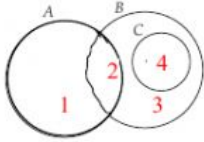
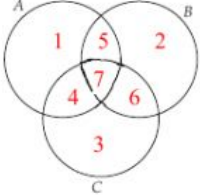
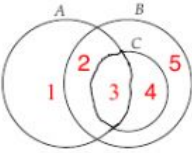
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Example 5

(a) $P \cap Q$ *Penyelesaian* $P \cap Q \cap R'$ *Penyelesaian*



R' ialah pelengkap bagi set R .
 R' is the complement of set R .

1 $A \cap B$ 	2 $A \cap B$ 	3 $A \cap B$ 
4 $A \cap B \cap C$ 	5 $A \cap B \cap C$ 	6 $A \cap B \cap C'$ 