

(14) SETS – SET

(a) **Set Semesta / Universal sets (ξ)** – nilai didalam carta venn, tiada nilai lain diluar carta

Elemen (\in) – benda di dalam set

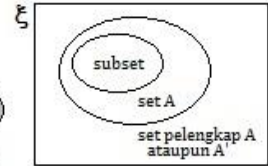
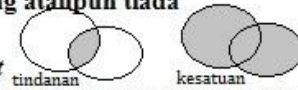
Subset (\subset) – set dalam set

Set Kosong / empty set ($\{ \}$, \emptyset) – nilai dalam set kosong ataupun tiada

Tindanan / intersection (\cap) - bertindih

Kesatuan / union (\cup) – kesemua nilai / tambah dua set

Set Pelengkap / complements of sets ($'$) - nilai di luar set (Kecuali set semesta ξ)



Contoh :

$$\xi = \{ 0, 1, 2, 3, 4, 5, 6, 7, 8, 9 \}$$

$$A = \{ 3, 4, 5 \}, \quad B = \{ 4, 5, 6, 7, 8 \}, \quad C = \{ \text{nombor lebih besar dari 10} \}$$

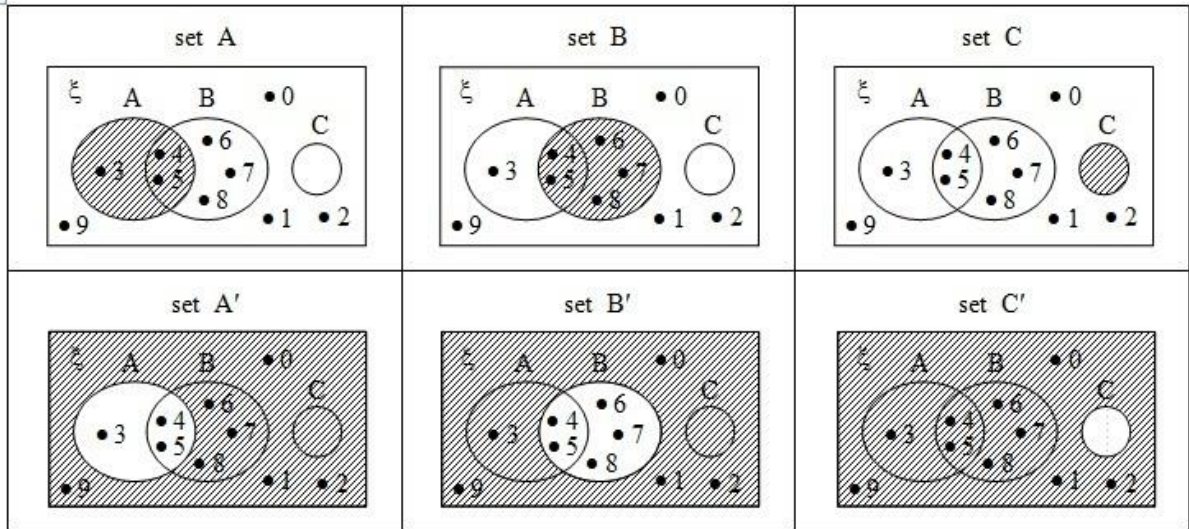
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| <ul style="list-style-type: none"> • $3 \in A, 4 \in A, 5 \in A$ • $0 \notin B, 1 \notin B, 2 \notin B, 3 \notin B, 9 \notin B$ • $C = \{ \}$ or $C = \emptyset$ • $A \neq B$ • $n(B) = 5$ • $A \not\subset B$ • $\{ \} \subset A, \emptyset \subset B$ | <ul style="list-style-type: none"> • the number of subsets of $A = 2^3 = 8$ • subset of $A = \{ \}, \{3\}, \{4\}, \{5\}, \{3, 4\}, \{3, 5\}, \{4, 5\}, \{3, 4, 5\}$ • $A' = \{0, 1, 2, 6, 7, 8, 9\}$ • $A \cap B = \{4, 5\}$ • $(A \cap B)' = \{0, 1, 2, 3, 6, 7, 8, 9\}$ • $A \cup B = \{3, 4, 5, 6, 7, 8\}$ • $(A \cup B)' = \{0, 1, 2, 9\}$ |
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** bilangan subset untuk set = 2^n , n adalah elemen

** Semua set ada mempunyai set kosong sebagai subset

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(b) **Gambarajah Venn / Venn Diagrams**



Set Semesta / Universal sets – nilai didalam carta venn, tiada nilai lain diluar carta

Elemen – benda di dalam set

Subset – set dalam set

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Tindanan / intersection - bertindih

Kesatuan / union – kesemua nilai / tambah dua set

Set Pelengkap / complements of sets - nilai di luar set (Kecuali set semesta

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