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TUGAS 8

1. Tentukan Power Set
    a. A = {a}
       P ( A ) = { ∅, {a} }

    b. B = {a, b}
       P ( B ) = { ∅, {a}, {b}, {a, b} }

    c. C = {1, 2, 3}
       P ( C ) = { ∅, {1}, {2}, {3}, {1, 2}, {1, 3}, {2, 3}, {1,2,3} }

2. Diketahui A = { 1, 2, 3, 4, 5 } dan B = { 0, 3, 6 }
    a. A U B
       => { 0, 1, 2, 3, 4, 5, 6 }

    b. A - B
       => { 1, 2, 4, 5 }

    c. A ∩ B
       => { 3 }

    d. B - A
       => { 0, 6 }

3. Tentukan kardinalitas
    a. N ( P ) = 0
    b. N ( A ) = 3
    c. N ( Q ) = 10
    d. N ( B ) = 21
    e. N ( S ) = 6

4. Jika F = {5,7} dan G = {p,q,r,s}, tentukan F x G !

F x G = { ( 5, ρ ), ( 5, q ), ( 5, r ), ( 5, s ), ( 7, ρ ), ( 7, q ), ( 7, r ), ( 7, s ) }

5. Jika $F = \{1,3,5,7,9,11,13\}$ dan $G = \{3,4,5,6\}$, tentukan F $\oplus$ G !

F + G = ( F - G ) U ( G - F )
= { 1, 7, 9, 11, 13 } U { 4, 6 }
= { 1, 4, 6, 7, 9, 11, 13 }

6. Jika $A = \{11,12,13,14,15,16\}$ dan $B = \{11,13,15,17,19\}$, tentukan A – B dan B – A !

A - B = { 12, 14, 16 }
B - A = { 17, 19 }
( A - B ) dan ( B - A ) = $\varnothing$