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* slide 31

Pasangan terurut

(a, b) dan $(c, d) \longrightarrow a = c$ dan $b = d$

soal :

pasangan terurut $(x + y, 1)$ dan $(3, x - y)$, carilah x dan y

$x + y = 3$	$x + y = 3$
$x - y = 1$ +	$2 + y = 3$
$2x = 4$	$y = 3 - 2$
$x = 2$	$y = 1$

* slide 32

Product set

soal :

$A = \{a, b\}$

$B = \{2, 3\}$

$C = \{3, 4\}$

carilah :

- $(A \times B) \cup (A \times C)$: [illegible]

  $\{(a,2), (a,3), (b,2), (b,3)\} \cup \{(a,3), (a,4), (b,3), (b,4)\}$

  $\{(a,2), (a,3), (a,4), (b,2), (b,3), (b,4)\}$

- $A \times B \times C$: $\{(a,2,3), (a,3,3), (a,2,4), (a,3,4), (b,2,3), (b,3,3), (b,2,4), (b,3,4)\}$

* slide 40

Aljabar fungsi

soal :

$A = \{a, b, c\}$, f dan g adalah fungsi riil, didefinisikan

$f(a) = 2$	$f(b) = -2$	$f(c) = 3$
$g(a) = 2$	$g(b) = 0$	$g(c) = 1$

- $f + 3g$, maka :

$(f + 3g)(a) = f(a) + 3g(a) = 2 + 3 \cdot 2 = 8$

$(f + 3g)(b) = f(b) + 3g(b) = -2 + 3 \cdot 0 = -2$

$(f + 3g)(c) = f(c) + 3g(c) = 3 + 3 \cdot 1 = 6$

$f + 3g = \{(a, 8), (b, -2), (c, 6)\}$

- $fg - 3f$, maka :

$(fg - 3f)(a) = f(a)\,g(a) - 3 \cdot f(a) = 2 \cdot 2 - 3 \cdot 2 = 2$

$(fg - 3f)(b) = f(b)\,g(b) - 3 \cdot f(b) = -2 \cdot 0 - 3 \cdot -2 = 6$

$(fg - 3f)(c) = f(c)\,g(c) - 3 \cdot f(c) = 3 \cdot 1 - 3 \cdot 3 = -6$

$fg - 3f = \{(a, 2), (b, 6), (c, -6)\}$

- $|g|(x)$, maka

$|g(a)| = 2$

$|g(b)| = 0$

$|g(c)| = 1$

-

- $(g + 2)(x)$, maka :

$(g + 2)(a) = g(a) + 2 = 2 + 2 = 4$

$(g + 2)(b) = g(b) + 2 = 0 + 2 = 2$

$(g + 2)(c) = g(c) + 2 = 1 + 2 = 3$