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Tugas : Kalkulus Pertemuan 4 PDF

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Pertemuan 4 - Tugas PDF

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1. $2x - 4 > 0$
$2x > 4$
$x > 2$

2. $5 > 4x - 1$
$5 + 1 > 4x$
$6 > 4x$
$4x < 6$
$2x < 3$
$x < \frac{3}{2}$
$x < 1{,}5$

3. $2x + 6 \leq x + 1$
$2x - x \leq 1 - 6$
$x \leq -5$

4. $3x - 4 \geq 5x + 1$
$3x - 5x \geq 1 + 4$
$-2x \geq 5$
$x \leq \frac{-5}{2}$

5. $x^2 - 7x + 12 \leq 0$ $\quad -3 \cdot -4 = 12$
$(x-3)(x-4) \leq 0$ $\quad -3 + (-4) = -7$
$(x-3) = 0$ | $(x-4) = 0$
$x = 3$ | $x = 4$

$x \geq 3$ atau $x \geq 4$

6. $2x^2 + 11x + 3 \leq -2$ | $2x + 1 = 0$ | $x + 5 = 0$
$2x^2 + 11x + 3 + 2 \leq 0$ | $2x = -1$ | $x = -5$
$2x^2 + 11x + 5 \leq 0$ | $x = \frac{-1}{2}$ |
$(2x+1)(x+5) \leq 0$ |
$x \geq -5$ atau $x \leq -\frac{1}{2}$ |

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7. $x^3 - 2x^2 - x + 1 \leq -1$

$x^3 - 2x^2 - x + 1 + 1 \leq 0$

$x^3 - 2x^2 - x + 2 \leq 0$

$(x-1)(x+1)(x-2) \leq 0$

$x \in R \mid x \leq -1$ atau $1 \leq x \leq 2$

8 $3(x-2) \geq x+1$

$3x - 6 \geq x + 1$

$3x - x \geq 1 + 6$

$2x \geq 7$

$x \geq \frac{7}{2}$

$x \geq 3{,}5$

9. $x^2 - 7x + 12 > 0$

$(x-3)(x-4) > 0$

$x - 3 = 0 \qquad x - 4 = 0$

$x = 3 \qquad x = 4$

$x < 3$ atau $x > 4$

10. $\frac{2x+8}{x-2} \leq x + 1$

$\frac{2x+8}{x-2} - (x+1) \leq 0$

$\frac{2x + 8 - x^2 + x + 2}{x-2} \leq 0$

$\frac{x^2 - 3x - 10}{x-2} \geq 0$

$\frac{(x-5)(x+2)}{x-2} \geq 0$

$x \in R \mid -2 \leq x < 2$ atau $x \geq 5$

JOYKO