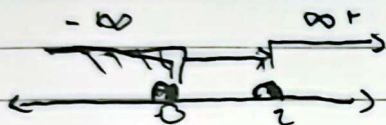


Latihan

$$y = |x| - |x-2|$$

$$|x| = \begin{cases} x, & x \geq 0 \quad (+) \\ -x, & x < 0 \quad (-) \end{cases}$$

$$|x-2| = \begin{cases} x-2, & \text{jika } x-2 \geq 0 \rightarrow x \geq 2 \quad (+) \\ -(x-2) \rightarrow -x+2, & \text{jika } -x+2 \rightarrow x < 2 \quad (-) \end{cases}$$



$$\begin{cases} (-\infty, 0), & [0, 2), & [2, +\infty) \\ x < 0 & 0 \leq x < 2 & x \geq 2 \end{cases}$$

$$\begin{aligned} \textcircled{1} \quad y &= -x - (-x + 2) \\ y &= -x + x - 2 \\ y &= -2 \end{aligned} \quad \left. \begin{array}{l} \\ \\ \end{array} \right\} (-, -)$$

$$\begin{aligned} \textcircled{2} \quad y &= x - (-x + 2) \\ &= x + x - 2 \\ &= 2x - 2 \end{aligned} \quad \left. \begin{array}{l} \\ \\ \end{array} \right\} (+, -)$$

$$\begin{aligned} \textcircled{3} \quad y &= (-x + 2) - x \\ &= -2x + 2 \end{aligned} \quad \left. \begin{array}{l} \\ \\ \end{array} \right\} (-, +)$$

$$\begin{aligned} \textcircled{4} \quad y &= -x - (x - 2) \\ &= -x - x + 2 \\ &= -2x + 2 \end{aligned} \quad \left. \begin{array}{l} \\ \\ \end{array} \right\} (+, +)$$

$$y = \begin{cases} -2 & (x < 0) \\ 2x - 2 & (0 \leq x < 2) \\ -2x + 2 & (x \geq 2) \end{cases}$$