

$$\begin{array}{r} 343 \\ 49 \\ 7 \\ 1 \end{array} \bigg| \begin{array}{l} 7 \\ 7 \\ 7 \\ 7^3 \end{array}$$

$$\begin{array}{r} 343 \\ 28 \\ 63 \end{array} \bigg| \begin{array}{l} 7 \\ 49 \\ 7 \end{array}$$

$$\begin{array}{r} 6 \\ 45 \\ 7 \\ 343 \end{array}$$

DATA

DATA

$$7x^2 - 4x + 3 \leq 343$$

$$7x^2 - 4x + 3 \leq 7^3$$

$$a > 1$$

$$x^2 - 4x + 3 \leq 3$$

$$x^2 - 4x \leq 0$$

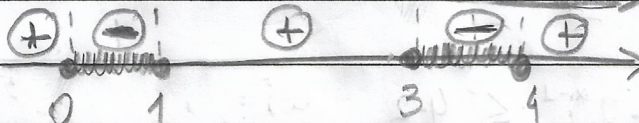
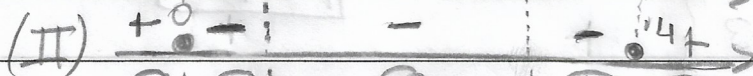
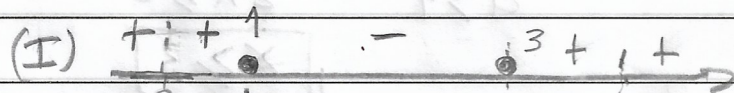
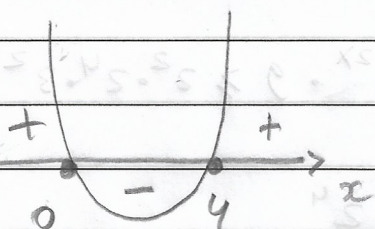
$$f(x) = x^2 - 4x$$

$$x^2 - 4x = 0$$

$$x(x-4) = 0$$

$$x=0 \text{ ou } x-4=0$$

$$x=4$$



$$S = \{x \in \mathbb{R} / 0 \leq x \leq 1 \text{ ou } 3 \leq x \leq 4\}$$

B99. c e d

$$c) 4^{x+1} - 2^{2x+1} + 4^x - 2^{2x-1} - 4^{x-1} \geq 144$$

$$(2^2)^{x+1} - 2^{2x+1} + (2^2)^x - 2^{2x-1} - (2^2)^{x-1} \geq 144$$

$$2^{2x+2} - 2^{2x+1} + 2^{2x} - 2^{2x-1} - 2^{2x-2} \geq 144$$

$$2^{2x} \cdot 2^2 - 2^{2x} \cdot 2^1 + 2^{2x} - 2^{2x} \cdot 2^{-1} - 2^{2x} \cdot 2^{-2} \geq 144$$

$$2^{2x} \cdot (2^2 - 2^1 + 1 - 2^{-1} - 2^{-2}) \geq 144$$

$$\begin{array}{r} 144 \\ 72 \\ 36 \\ 18 \\ 9 \\ 3 \end{array} \bigg| \begin{array}{l} 2 \\ 2 \\ 2 \\ 2 \\ 3 \\ 3 \end{array} \left. \vphantom{\begin{array}{r} 144 \\ 72 \\ 36 \\ 18 \\ 9 \\ 3 \end{array}} \right\} 2^4 \cdot 3^2$$