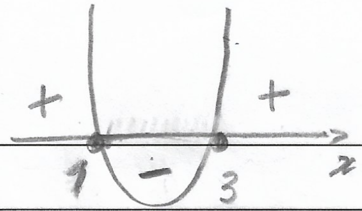


343	7
49	7
7	7
1	7^3

$343 \,|\, 7$; 28 ; 49 ; 63

$49 \times 7 = 343$

DATA

$7^{x^2-4x+3} \le 343$

$7^{x^2-4x+3} \le 7^3 \;\rightarrow\; x^2-4x+3 \le 3$

$a > 1$

$x^2-4x \le 0$

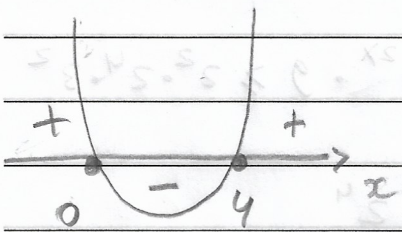
$f(x) = x^2-4x$

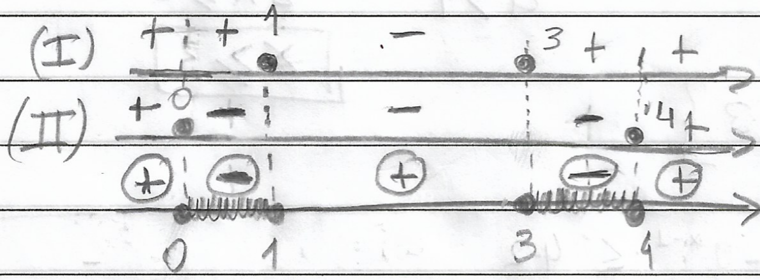
$x^2-4x=0$

$x(x-4)=0$

$x=0$ ou $x-4=0$

$x=4$





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

B99. c e d

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

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

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

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

$2^{2x}\cdot\left(2^2 - 2^1 + 1 - 2^{-1} - 2^{-2}\right) \ge 144$

144	2
72	2
36	2
18	2
9	3
3	3
1	

2^4, 3^2