

2011 - 2010 :			
2 :	:	:	3 :
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2011 -02 - 15: :

: (03)

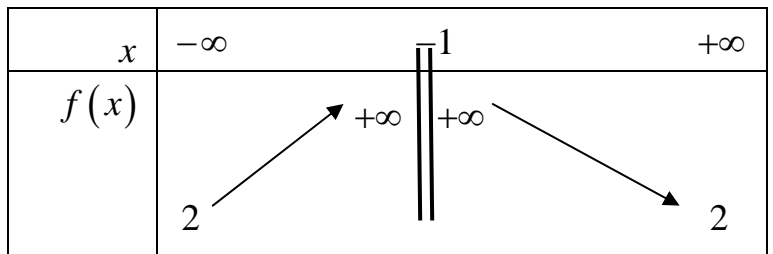
- . $3u_{n+1} = u_n + 4$: n $u_0 = -1$: (u_n) (1)
- . $u_n \leq 2$ n (u_n) (2)
- . (u_n) (3)

: (04)

- $u_{n+1} = \frac{1}{3}u_n + 2$: $u_0 = 2$ (u_n) (1)
- . u_3 u_2 u_1 (2)
- . $v_n = u_n - 3$: n (v_n) (3)
- . n u_n n v_n (4)
- . (u_n) (5)
- . (u_n) (6)

(2) :

: (C_f) $]-\infty ; -1[\cup]-1 ; +\infty[$ f



. (C_f) $y = 2$ (1)

. $f(x) = 0$ (2)

$$S =]-\infty; -1[\cup]-1; +\infty[\quad f(x) > 0 \quad (3)$$

$$x < -2 \quad f(-2) > f(x) : \quad]-\infty; -1[\quad (4)$$

$$(C_f) \quad A(-3;1) \quad (5)$$

$$f \quad (6)$$

:(03)

$$g(x) = x^3 - 3x + 2 : \quad (I)$$

$$g(x) = (x-1)(x^2 + x - 2) : x \quad (1)$$

$$h(x) = x g(x) : h(x) \quad (2)$$

$$f(x) = \frac{x^3 + x^2 + 3x - 1}{x^2} : R^* \quad x \quad f \quad (II)$$

$$\|\vec{i}\| = \|\vec{j}\| = 1, (o; \vec{i}; \vec{j}) \quad (C_f)$$

$$f'(x) = \frac{h(x)}{x^4} : R^* \quad x \quad (1)$$

$$f \quad (2)$$

$$(C_f) \quad (3)$$

$$(C_f) \quad (4)$$

$$\frac{1}{4} < \alpha < \frac{1}{2} : \alpha \quad f(x) = 0 \quad (5)$$

$$(C_f) \quad (6)$$

:(08)

$$V_2 \quad 4 \quad V_1 \quad V_2 \quad V_1$$

$$V_1 \quad 3 \quad 1$$

$$V_2 \quad (1)$$

$$V_1 \quad (2)$$