

1 .1  $f$   $\begin{cases} f(x) = \frac{x+3}{x+1} ; x \leq 1 \\ f(x) = \frac{x^2-1}{x-1} ; x > 1 \end{cases}$  008

0 .0  $f$   $\begin{cases} f(x) = \frac{|x|+2x}{x^2-|x|} ; x \neq 0 \\ f(0) = -3 \end{cases}$  009

*La dichotomie*  $f(x) = x^3 - 3x^2 - 5$  010

.]2, 4[  $\alpha$   $f(x) = 0$  (

.  $3 < \alpha < 4$   $f(3)$  (

.  $\alpha$   $f(3,5)$  (

.  $25 \times 10^{-2}$   $\alpha$  (

$f(x) = \frac{x^2}{x^2-1}$  : (2007 / 2006) 011

.  $I = ]-1, 0]$   $f$  (1

.  $J$   $f$  (2

.  $J$   $x$   $f^{-1}(x)$  (3

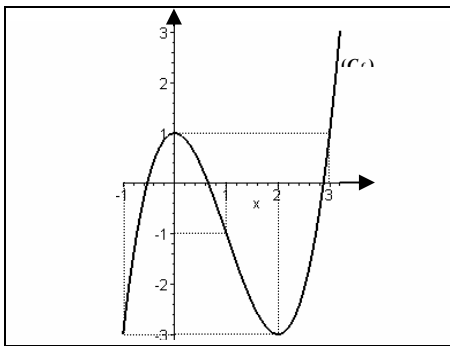
.]6, 7[:  $f(x) = x - 5$  : (4

$x \in ]-\infty, 2]$   $f(x) = 2x^2 - 8x + 5$  : 012

.  $J$   $f$  (1

.  $f(x) = 2(x-2)^2 - 3$  : (2

.  $J$   $x$   $f^{-1}(x)$  (3



بالتوفيق

.[-1, 3]  $f$  (1

.[-1, 3]  $f(x) = 1$  : (2

.]1, 3] [-1, 1] [-1, 0] [1, 2] (3

.  $f$  (4

. [-1, 2]  $f$  (5

$L_2 = \lim_{x \rightarrow -\infty} (4x^4 + 3x^3 + 2)$   $L_1 = \lim_{x \rightarrow +\infty} (4x^4 + 3x^3 - 7x^4 + 2)$  001

$L_4 = \lim_{\substack{x \rightarrow 3 \\ x > 3}} (\frac{3x-10}{x^2-5x+6})$   $L_3 = \lim_{x \rightarrow \infty} (\frac{3x^4-2x^9-1}{x^2+2})$

$L_6 = \lim_{x \rightarrow -2} (\frac{\sqrt{x+11}-3}{x+2})$   $L_5 = \lim_{x \rightarrow \frac{1}{2}} (\frac{2x^2+5x-3}{4x^2-1})$

$L_8 = \lim_{x \rightarrow 5} (\frac{x-\sqrt{5x}}{x^2+x})$   $L_7 = \lim_{x \rightarrow 1} (\frac{-3x^3+4x-1}{x-1})$

$L_{10} = \lim_{x \rightarrow 1} (\frac{\sqrt{x}+x-2}{x-1})$   $L_9 = \lim_{x \rightarrow -3} (\frac{x^3+27}{x+3})$

$L_{12} = \lim_{x \rightarrow +\infty} (\sqrt{x^2+2x+2}-3x)$   $L_{11} = \lim_{x \rightarrow +\infty} (\sqrt{x^2+2x+1}+3x)$

.1  $h$  (1  $\begin{cases} h(x) = \frac{x^2+2x-3}{x-1} ; x \neq 1 \\ h(1) = 4 \end{cases}$  002

. $\mathbb{R}$   $h$  (2

0 .0  $f$   $\begin{cases} f(x) = 3-x^2 ; x < 0 \\ f(x) = \frac{x^2-1}{1-2x} ; x \geq 0 \end{cases}$  003

3  $f$   $a$   $\begin{cases} f(x) = \frac{\sqrt{x+1}-a}{x-3} ; x \neq 3 \\ f(3) = \frac{1}{4} \end{cases}$  004

( ) 005

.  $f(x) = x^2$  : [-1, 2] (1

.  $f(x) = \frac{x+1}{x-2}$  : [-1, 1] (2

.  $f(x) = x^2 - 2x + 1$  :  $\mathbb{R}$  (3

.  $f(x) = x + 1 + \frac{4}{x^2}$  :  $]0, +\infty[$  (4

( ) 006

. [0, 3]  $x^5 - 3x^4 + x^2 - 1 = 0$  : (1

.  $\mathbb{R}$   $2x^3 + 5x - 4 = 0$  : (2

. -1 -2  $4x^3 + 9x^2 + 9x + 5 = 0$  : (3

.  $f(x) = \frac{2x-1}{x-4}$  :  $f$  007

.  $J$   $]4, +\infty[$   $f^{-1}$   $f$  (1

.  $J$   $x$   $f^{-1}(x)$  (2