

Listas das funções $y = f(x) = \dots$

(para o Trabalho de Gráficos de Cálculo I – 2011-1)

a)	$\frac{2x-3}{x+2}$	$\frac{x}{x^2-9}$	$\frac{2x^2-3x-2}{x^2+5x-6}$	$\frac{x+1}{x^3-4x+x^2-4}$	$\begin{cases} x^2+1, & x < 2 \\ 2, & x = 2 \\ 9-x^2, & x > 2 \end{cases}$
b)	$\frac{4x+5}{2x+2}$	$\frac{x^3+x^2-4x-4}{x+2}$	$\frac{3x^2+5x-2}{2x^2+x-3}$	$\frac{2}{-2x^2+x+1}$	$\begin{cases} \frac{x^2-4}{x-2}, & \text{se } x \neq 2 \\ 3, & \text{se } x = 2 \end{cases}$
c)	$\frac{3x+6}{2x-4}$	$\frac{x^3-2x^2-5x+6}{x-3}$	$\frac{2x^2-3x-2}{x^2+5x-6}$	$\frac{-3}{x^2+2x-3}$	$\begin{cases} \frac{-x^2-3x+4}{x+4}, & \text{se } x \neq -4 \\ 5, & \text{se } x = -4 \end{cases}$
d)	$\frac{x+\frac{1}{2}}{x-1}$	$\frac{x^3-2x^2-5x+6}{x-1}$	$\frac{3x^2+5x-2}{2x^2+x-3}$	$\frac{-4}{-x^2+2x+3}$	$\begin{cases} x , & \text{se } -4 < x \leq 0 \\ 4, & \text{se } 0 < x < \frac{1}{4} \\ 2, & \text{se } x = \frac{1}{4} \\ \frac{1}{4}, & \text{se } \frac{1}{4} < x \leq 4 \end{cases}$
e)	$\frac{3x-1}{x+2}$	$\frac{-x^4+13x^2-36}{x^2-4}$	$\frac{3x^2+x-2}{-4x^2+3x+1}$	$\frac{2}{-2x^2+x+1}$	$\begin{cases} \frac{x^2-x-2}{x-2}, & \text{se } x \neq 2 \\ 3, & \text{se } x = 2 \end{cases}$
f)	$\frac{x+3}{x+2}$	$\frac{2x^3-6x^2-3x+9}{x-3}$	$\frac{x}{\frac{x^2}{2}-1}$	$\frac{-3}{x^2+2x-3}$	$\begin{cases} \frac{-2x^2+x+1}{x-1}, & \text{se } x \neq 1 \\ -3, & \text{se } x = 1 \end{cases}$
g)	$\frac{2x-3}{x+2}$	$\frac{x}{x^2-9}$	$\frac{-1}{(x+2)^2}$	$\frac{x+1}{x^3-4x+x^2-4}$	$\begin{cases} \frac{-x^2-3x+4}{x+4}, & \text{se } x \neq -4 \\ 5, & \text{se } x = -4 \end{cases}$
h)	$\frac{x+3}{x+2}$	$\frac{x^3-2x^2-5x+6}{x-3}$	$\frac{-8}{x^2-4}$	$\frac{-4}{-4+x^2}$	$\begin{cases} x , & \text{se } -4 < x \leq 0 \\ 4, & \text{se } 0 < x < \frac{1}{4} \\ 2, & \text{se } x = \frac{1}{4} \\ \frac{1}{4}, & \text{se } \frac{1}{4} < x \leq 4 \end{cases}$
i)	$\frac{3x-1}{x+2}$	$\frac{2x^3-6x^2-3x+9}{x-3}$	$\frac{3x^2+x-2}{-4x^2+3x+1}$	$\frac{1}{x^2+2x-2}$	$\begin{cases} \frac{x^2-4}{x-2}, & \text{se } x \neq 2 \\ 3, & \text{se } x = 2 \end{cases}$