



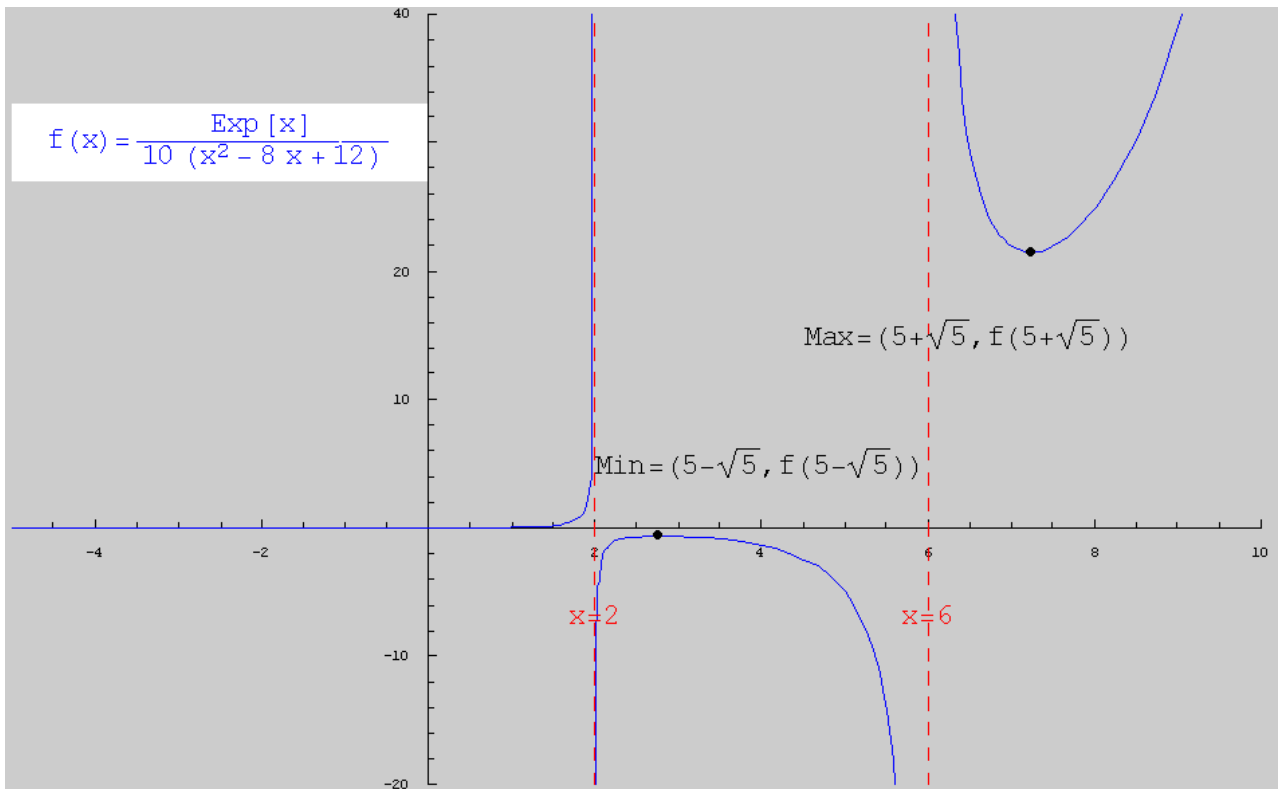
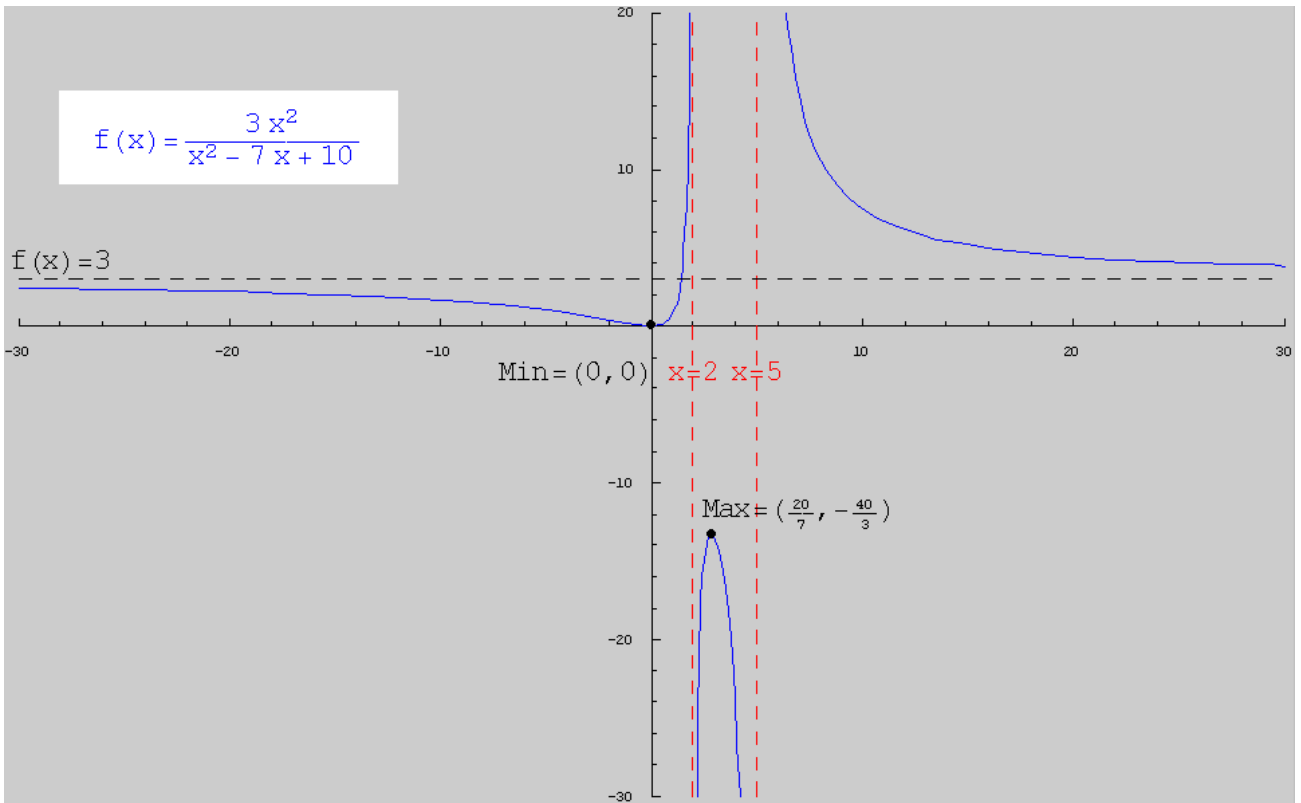
Estude as funções:

$$\frac{3x^2}{x^2 - 7x + 10}, \frac{\exp[x]}{10(x^2 - 8x + 12)}, \frac{\sqrt{x^2 - 3x + 2}}{x - 4}$$

Para cada função, complete a tabela e esboce o gráfico.

$f(x) = \dots\dots\dots$ ,  $f'(x) = \dots\dots\dots$

1	DOMÍNIO	$f : A \rightarrow B$	$A = \dots\dots\dots$
2	ZEROS	$f(x) = 0$ $x = \dots\dots\dots \Rightarrow y = \dots\dots\dots$ $x = \dots\dots\dots \Rightarrow y = \dots\dots\dots$ $x = \dots\dots\dots \Rightarrow y = \dots\dots\dots$	$(x, y)$ $(\dots\dots\dots, \dots\dots\dots)$ $(\dots\dots\dots, \dots\dots\dots)$ $(\dots\dots\dots, \dots\dots\dots)$
3	$x \rightarrow \pm\infty$	$\lim_{x \rightarrow -\infty} f(x) = \dots\dots\dots$ $\lim_{x \rightarrow +\infty} f(x) = \dots\dots\dots$	$(-\infty, \dots\dots\dots)$ $(+\infty, \dots\dots\dots)$
4	ASSÍNTOTAS	$x = \dots\dots\dots, x = \dots\dots\dots$ $\lim_{x \rightarrow \dots\dots\dots-} f(x) = \dots\dots\dots\infty$ $\lim_{x \rightarrow \dots\dots\dots+} f(x) = \dots\dots\dots\infty$ $\lim_{x \rightarrow \dots\dots\dots-} f(x) = \dots\dots\dots\infty$ $\lim_{x \rightarrow \dots\dots\dots+} f(x) = \dots\dots\dots\infty$	$(\dots\dots\dots^-, \dots\dots\dots\infty)$ $(\dots\dots\dots^+, \dots\dots\dots\infty)$ $(\dots\dots\dots^-, \dots\dots\dots\infty)$ $(\dots\dots\dots^+, \dots\dots\dots\infty)$
5	MAX - MIN	$f'(x) = 0$ $x = \dots\dots\dots \Rightarrow y = \dots\dots\dots$ $x = \dots\dots\dots \Rightarrow y = \dots\dots\dots$ $x = \dots\dots\dots \Rightarrow y = \dots\dots\dots$	$(\dots\dots\dots, \dots\dots\dots) \dots\dots$ $(\dots\dots\dots, \dots\dots\dots) \dots\dots$ $(\dots\dots\dots, \dots\dots\dots) \dots\dots$
6	PONTO DE INF.	$f''(x) = 0$	SIM/NÃO: ..... $\dots\dots < x < \dots\dots$ $\dots\dots < x < \dots\dots$



$$f(x) = \frac{\sqrt{x^2 - 3x + 2}}{x - 4}$$

