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③ $f(x) = \frac{3x^2}{x^2+x-2} = \frac{3x^2}{(x-1)(x+2)}$ $D_f = \mathbb{R} \setminus \{1, -2\}$

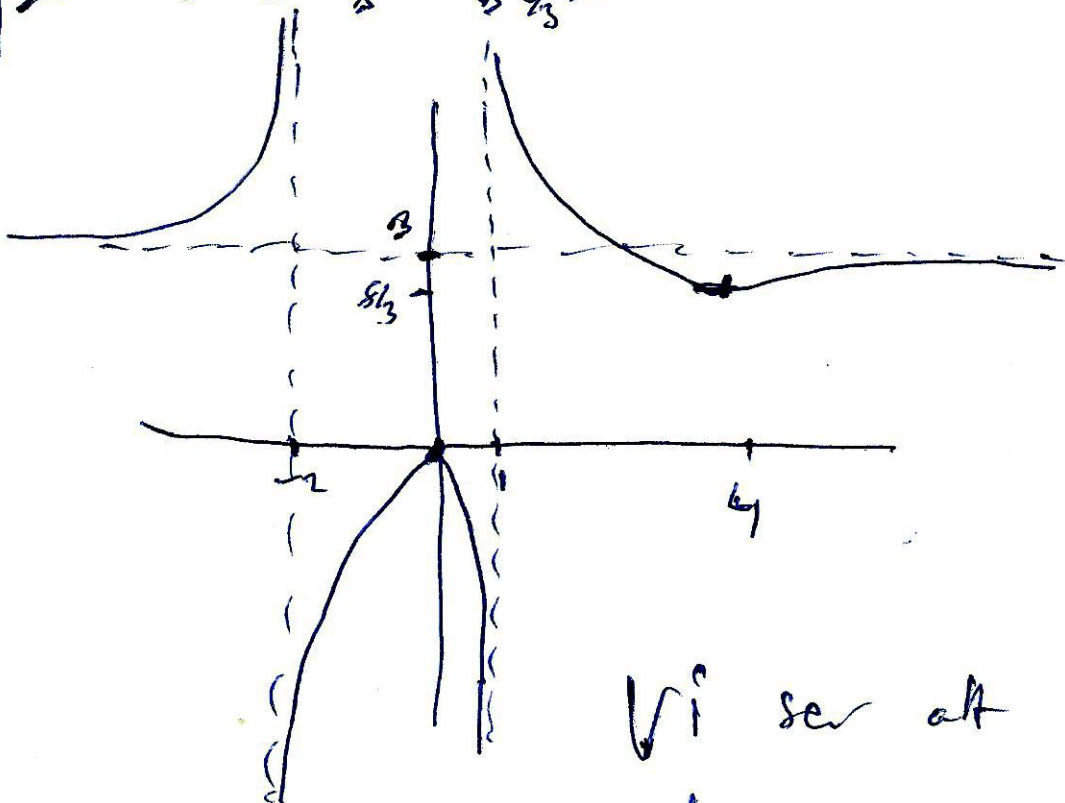
men $f(x) = \pm \infty$, $\lim_{x \rightarrow -2^\pm} f(x) = \pm \infty$ vertikala asymptot
 $\lim_{x \rightarrow 1^\pm} f(x) = \pm \infty$ vertikala asymptot

Vi ser vidare att de sneda asymptoten $\lim_{x \rightarrow \pm \infty} f(x) =$

$= \lim_{x \rightarrow \pm \infty} \frac{3}{x^2(1-\frac{1}{x})(1+\frac{2}{x})} = 3$

Derivata till $f'(x) = \frac{6x(x^2+x-2) - 3x^2(2x+1)}{(x-1)^2(x+2)^2} = \frac{3x^2-12x}{(x-1)^2(x+2)^2} = \frac{3x(x-4)}{(x-1)^2(x+2)^2}$

x	-2	0	1	4
f'	+	0	-	0
f	$\nearrow$	0	$\searrow$	$\nearrow$



Vi ser att

$V_f = (-\infty, 0] \cup [8/3, \infty)$