

discrim.

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

$\leftarrow \begin{matrix} 1 \\ -2-1 \\ -2:1 \end{matrix}$

div. pol.

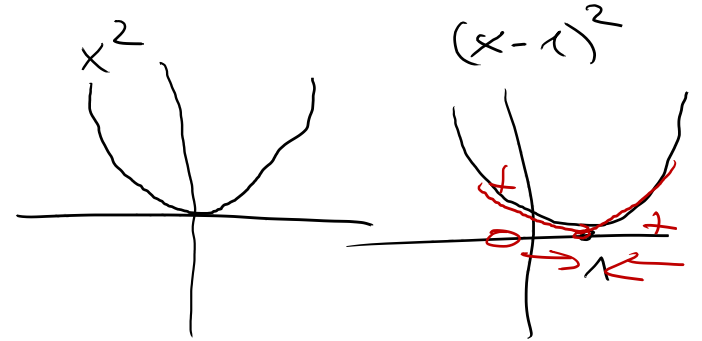
$$\frac{1-3+2}{0^3} = \frac{0}{0} \ddot{\smile}$$

$$\lim_{x \rightarrow 1} \frac{(x-1) \cdot (x-2)}{(x-1) \cdot (x-1)^2}$$

$$\frac{-1}{0_+} = -(\infty) \quad \frac{-1}{0_-} = -(\infty)$$

$$\lim_{x \rightarrow 1+} \frac{x-2}{(x-1)^2} = \frac{-1}{0_+} = -\infty$$

$$\lim_{x \rightarrow 1-} \frac{x-2}{(x-1)^2} = \frac{-1}{0_+} = -\infty$$

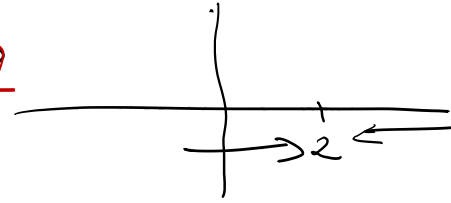


$\left. \begin{matrix} +\infty \\ -\infty \end{matrix} \right\} \text{lim } \cancel{A} \checkmark$

$$\lim_{x \rightarrow 2} \arctan \left[ \frac{-3}{(x-2)^2} \right] = \left[ \begin{array}{c} \pi \\ - \\ 2 \end{array} \right]$$

inner

$$\lim_{x \rightarrow 2} \left[ \frac{-3}{(x-2)^2} \right] = \frac{-3}{0^+} = -\infty$$



$$\lim_{t \rightarrow -\infty} \arctan t = -\frac{\pi}{2}$$

$\infty - \infty$

