

$$\text{Konv/Limes} \begin{cases} \binom{n}{-1} \frac{n^2 + 3n - 1}{2n^2 - 1} & \frac{2^{n+3} - 5^{n+1}}{7 \cdot 5^n + 3 \cdot 4^{n+1}} \\ \binom{n}{-1} \frac{-n^2 + 2n + 2}{3n^2 - n + 1} & \frac{3 \cdot 2^n + 3^{n+1}}{3^{n+2} + 2^{-n}} \end{cases}$$

$$\begin{cases} a_n \rightsquigarrow a \neq b & \Rightarrow \bigvee_{n_0} \bigwedge_{n \geq n_0} a_n \neq b \\ a_n \rightsquigarrow a < 0 & \Rightarrow \bigvee_{n_0} \bigwedge_{n \geq n_0} a_n < 0 \end{cases}$$

$$\begin{cases} X:Y \subset \mathbb{R} \text{ no bes} / X \cap Y \neq \emptyset & \Rightarrow X \cap Y \text{ no bes} / \sup X \cap Y \leq \sup X \wedge \sup Y / < \text{moeglich} \\ X \subset \mathbb{R} \text{ no bes} / X \neq \emptyset & \Rightarrow -X \text{ nu bes} / \inf -X = -\sup X \end{cases}$$

$$\begin{cases} f: g \text{ stet auf } a|b / f(a) < g(a) / f(b) > g(b) & \Rightarrow \bigvee_{a < c < b} f(c) = g(c) \\ \text{Int } I \xrightarrow[\text{stet}]{f} \mathbb{R}: f \text{ nicht no bes} & \Rightarrow f(I) \text{ abg} \end{cases}$$

$$\text{formale Def-Anw: not diff at } 0 \begin{cases} (x^2)^{1/4} \\ x|x| \end{cases}$$

$$\text{krit Punkte/Monotonie-Intval/lic Extr} \begin{cases} 3x^4 - 4x^3 - 12x^2 + 1 & -\frac{1}{2} | 1: 0 | 3 \\ x^3 - x + 1 & \frac{1}{2} | 3: 0 | 2 \end{cases} \text{Bild-Intervalle}$$

$$\text{n-Taylor-Poly} \begin{cases} \frac{1+x}{1-x} & a = 0 \\ \frac{1}{(1-x)^2} & a = 0 \end{cases}$$

$$\text{Folge } a_n \in \mathbb{R} \text{ induktiv} \begin{cases} a_0 = 1 \\ a_{n+1} = \sqrt{2a_n} \end{cases} \Rightarrow \begin{cases} a_n \text{ konv} \\ \text{bestimme Limes} \end{cases}$$