Dott. R. Monte: Esercizi consigliati per la preparazione della prova scritta del II canale del corso di Matematica Generale (Prof. L. Accardi).

I gruppo: grafici di funzioni

Tracciare i grafici delle seguenti funzioni:

$$f(x) \stackrel{def}{=} \frac{\sqrt{1-x}}{x-2}, \qquad f(x) \stackrel{def}{=} \left|\frac{x^2-1}{x^2-3x+2}\right|, \qquad f(x) \stackrel{def}{=} \log\left(1-x^2\right).$$

$$f(x) \stackrel{def}{=} \frac{x-1}{\sqrt{x+1}}, \qquad f(x) \stackrel{def}{=} \left|\frac{x^2-4x+4}{x^2-4x+3}\right|, \qquad f(x) \stackrel{def}{=} \exp\left(x^3-1\right).$$

$$f(x) \stackrel{def}{=} \frac{|x-1|}{x+1}, \qquad f(x) \stackrel{def}{=} \exp\left(x^2-3x+2\right), \qquad f(x) \stackrel{def}{=} \sqrt{\frac{2-x}{x-3}}.$$

$$f(x) \stackrel{def}{=} \left|\frac{1-x^2}{x^2+1}\right|, \qquad f(x) \stackrel{def}{=} \frac{1-x}{|x-2|}, \qquad f(x) \stackrel{def}{=} \log\left(\frac{4x+1}{1-4x}\right).$$

$$f(x) \stackrel{def}{=} \exp\left(\frac{x-1}{x-3}\right), \qquad f(x) \stackrel{def}{=} \sqrt{1-x}\,|x-2|, \qquad f(x) \stackrel{def}{=} \log\left(\frac{1-x}{x-2},\right).$$

$$f(x) \stackrel{def}{=} \sqrt{\frac{x-1}{x-3}}, \qquad f(x) \stackrel{def}{=} \left|\frac{4-x^2}{x^2-5x+6}\right|, \qquad f(x) \stackrel{def}{=} \log\left(x^2-3x+2\right).$$

$$f(x) \stackrel{def}{=} \exp\left(\frac{3x-1}{2x+1}\right), \qquad f(x) \stackrel{def}{=} \left|\frac{x^2-1}{x^2-9}\right|, \qquad f(x) \stackrel{def}{=} \sqrt{x^2-5x+4}.$$

$$f(x) \stackrel{def}{=} \left|\frac{x^3-x^2+x-1}{x^2-3x+2}\right|, \qquad f(x) \stackrel{def}{=} \log\left(\frac{x-1}{x+3}\right), \qquad f(x) \stackrel{def}{=} \sqrt{\frac{3x-1}{2x+1}}.$$

$$f(x) \stackrel{def}{=} \exp\left(\frac{x^2-3x}{x-1}\right), \qquad f(x) \stackrel{def}{=} \left|\frac{x^2-3x+2}{x^3-1}\right|, \qquad f(x) \stackrel{def}{=} x\sqrt{1-x^2}.$$

$$f(x) \stackrel{def}{=} \exp\left(\frac{x-1}{x^2-3x}\right), \qquad f(x) \stackrel{def}{=} \left|\frac{x^2-2x+1}{x^3-1}\right|, \qquad f(x) \stackrel{def}{=} \log\left(x-x^3\right).$$

$$f(x) \stackrel{def}{=} \sqrt{\frac{x}{x^2-1}}, \qquad f(x) \stackrel{def}{=} \left|\frac{x^2-5x+6}{x^2-2x+3}\right|, \qquad f(x) \stackrel{def}{=} \exp\left(x^5-x^4\right).$$

$$f(x) \stackrel{def}{=} \log\left(\frac{x^2}{x-1}\right), \qquad f(x) \stackrel{def}{=} \left|\frac{x^2-4x+3}{x^2-6x+8}\right|, \qquad f(x) \stackrel{def}{=} \exp\left(x^3-x^2-x+1\right).$$

$$f(x) \stackrel{def}{=} \sqrt{\frac{x-1}{x^2}}, \qquad f(x) \stackrel{def}{=} \left|\frac{x^2-4x+3}{x^2-6x+8}\right|, \qquad f(x) \stackrel{def}{=} \log\left(x^3-x\right).$$

$$f(x) \stackrel{def}{=} \exp\left(\frac{x^3}{x-1}\right), \qquad f(x) \stackrel{def}{=} |x-4|\sqrt{x^2-9}, \qquad f(x) \stackrel{def}{=} \log\left(x^2-4x+3\right).$$

$$f(x) \stackrel{def}{=} \log\left(x^2-4\right), \qquad f(x) \stackrel{def}{=} \left|\frac{x^2+x+1}{x^2}\right|, \qquad f(x) \stackrel{def}{=} \exp\left(\frac{x-1}{x^2+x}\right).$$

$$f(x) \stackrel{def}{=} \frac{x}{\sqrt{x^2-4}}, \qquad f(x) \stackrel{def}{=} \frac{x^2+4x+3}{|x|}, \qquad f(x) \stackrel{def}{=} \log\left(\frac{x^2+x}{x-1}\right).$$

$$f(x) \stackrel{def}{=} \frac{|x|+1}{x-1}, \qquad f(x) \stackrel{def}{=} \sqrt{\frac{x}{x^2+4x+3}}, \qquad f(x) \stackrel{def}{=} \exp\left(\frac{x-4}{x^2-2x+1}\right).$$

$$f(x) \stackrel{def}{=} \log\left(\frac{x^2}{x+1}\right), \qquad f(x) \stackrel{def}{=} \frac{|x^2+4x+3|}{x^2+1}, \qquad f(x) \stackrel{def}{=} \sqrt{\frac{x^2-2x+1}{x-3}}.$$

$$f(x) \stackrel{def}{=} \frac{x^2}{\sqrt{x+1}}, \qquad f(x) \stackrel{def}{=} \exp\left(\frac{x^2-4x+3}{x^2-1}\right), \qquad f(x) \stackrel{def}{=} \left|\frac{x-3}{x^2-2x+1}\right|.$$

$$f(x) \stackrel{def}{=} \exp\left(\frac{x^2-1}{x^2+1}\right), \qquad f(x) \stackrel{def}{=} \frac{x^2-x-2}{x^3+4x^2+3x}, \qquad f(x) \stackrel{def}{=} \log\left(\frac{x-3}{x^2-2x+1}\right).$$

$$f(x) \stackrel{def}{=} \sqrt{\frac{x^2+1}{x^2-1}}, \qquad f(x) \stackrel{def}{=} \left|\frac{x^3-4x^2+3x}{x^2+x-2}\right|, \qquad f(x) \stackrel{def}{=} \log\left(\frac{x^2-4x+3}{x-2}\right).$$

$$f(x) \stackrel{def}{=} \log\left(\frac{x^2+x-2}{x^2-2x+1}\right), \qquad f(x) \stackrel{def}{=} \exp\left(\frac{x^2-3x}{x^2-x}\right), \qquad f(x) \stackrel{def}{=} \sqrt{x^3+4x^2+3x}.$$

$$f(x) \stackrel{def}{=} \left|\frac{x^2+x-2}{x^2-2x+1}\right|, \qquad f(x) \stackrel{def}{=} \log\left(\frac{x^2-x}{x^2-3x}\right), \qquad f(x) \stackrel{def}{=} \exp\left(x^3-4x^2+3x\right).$$

$$f(x) \stackrel{def}{=} (x-2)\sqrt{x^2-2x+1}, \qquad f(x) \stackrel{def}{=} \frac{|x^2-x|}{x^2-3x}, \qquad f(x) \stackrel{def}{=} \exp\left(\frac{x^3-4x^2+3x}{x^2-3x}\right).$$