DISEQUAZIONI

Risolvere le seguenti disequazioni

$(x+5)(x-5) \geq 0$ $\quad \frac{x-2}{x+3} > 0$ $\quad \frac{x+3}{x-2} < 1$ $\quad \frac{x^2-1}{x-2} > 0$ $\quad \frac{(x-2)(x+1)}{x+7} < 0$

$x^2(x-1) \geq 0$ $\quad x(x-7)^2 < 0$ $\quad (x-5)(x+10) \leq 0$ $\quad -x^2-4x-5 > 0$

$\frac{3x+1}{x-1} < \frac{2(x+1)}{x-2}$ $\quad |x| > x$ $\quad |x-5| < |x+1|$ $\quad \|x+4\| < 1$ $\quad |x+2| > |x-1|$

$\frac{3-x}{|x+1|} \leq 2x$ $\quad \frac{|x+1|(x-2)}{x+3} > x$ $\quad \left|\frac{3x-2}{x+3}\right| \leq 0$ $\quad \left|\frac{x}{x-1}\right| < 2+x$

$\sqrt{x+|x|} \geq 3-x$ $\quad \sqrt{x^2-4} \leq 1-x$ $\quad 1-|x| < \sqrt{x}$ $\quad 1-|x| < \sqrt{x^2}$ $\quad |1-|x|| \geq 1$

$\sqrt[7]{x^2-2x} \leq x$ $\quad |x^2+4| \geq x$ $\quad \sqrt{x+\frac{1}{2}} \leq \sqrt[3]{-x-\frac{1}{2}}$ $\quad \sqrt{x^2-8x+25} > -x+9$

$x\sqrt[3]{x} < 0$ $\quad \sqrt[4]{x+3} \leq -\sqrt{x^2+3x}$ $\quad 5^{2x}+5^x-5 \geq 0$ $\quad 2\sin^2 x - \cos x - 1 > 0$

$\sin^2 x + \frac{3}{2}\cos x - 2 > 0$ $\quad 3^x \geq 2$ $\quad \log_{10}\left(\frac{1}{3}-x\right) \geq 0$ $\quad \cos^2 x \sin 2x > 0$

$|x^2+1| \geq \sin^2 x$ $\quad \frac{\sqrt{x-2}}{\sqrt{x-1}} > 0$ $\quad \sqrt{\frac{x-2}{x-1}} > 0$ $\quad \frac{\sqrt{x+1}}{\sqrt[3]{-3x+1}} < \sqrt[6]{|-3x+1|}$

$\sqrt[5]{x^2-2x} \leq |x|$ $\quad \left|\frac{\cos 2x}{\sin x}\right| < 1$ $\quad \sqrt{\log_{10}(x^2-1)} > \sqrt{\log_{10}(2x-1)}$

$\sqrt{\sin^2 x - 2\sin x + 1} > \sin 2x$ $\quad \sqrt{\log x} \geq \sqrt{|x|}$ $\quad 2^{\sin x} \leq \sqrt{2}$

$\sin(\arcsin x) \geq \cos x$

Risolvere le seguenti disequazioni al variare del parametro $t \in \mathbb{R}$

$x^2 + |tx| \geq x$ $\quad x + \sqrt{t|x|} \geq t$ $\quad |2t-x| > \frac{1}{x}$ $\quad tx^2 - \sqrt{|t|}\,x \leq t$

$(t^2+t+3)x^2 + 2tx + 1 \leq 0$

$2kx^2 - x + 2k \geq 0$ $\quad x^2 + t < 0$