Disequazioni e sistemi di disequazioni

disequazioni di riepilogo		
1	$(3x^2-4)\left(1+\frac{1}{x-1}\right)<0$	$-\frac{2}{3}\sqrt{3}<x<0 \cup 1<x<\frac{2}{3}\sqrt{3}$
2	$1+\frac{1}{3-2x}<\frac{1}{x+1}$	$-1<x<\frac{2-\sqrt{6}}{2} \cup \frac{3}{2}<x<\frac{2+\sqrt{6}}{2}$
3	$\frac{\lvert x-1\rvert+2}{\sqrt{x^2-1}+3x}\leq 0$	$x\leq -1$
4	$1+\frac{\lvert x\rvert}{\sqrt{x}}>0$	$x\neq 0$
5	$\frac{2x^2-1}{\lvert x\rvert-1}>\sqrt{x}+1$	$x>1$
6	$\frac{\sqrt[3]{x^2-5x+5}+1}{\sqrt{\lvert x\rvert-2}+1}\geq 0$	$x\leq -2 \cup x\geq 3$
7	$\left\lvert\frac{2-\sqrt{x}}{1-\lvert 2x\rvert}\right\rvert>1$	$0\leq x<\frac{1}{2} \cup \frac{1}{2}<x<1$
8	$\frac{\lvert x-2x^2\rvert-2\lvert x+2\rvert}{\sqrt[3]{3x}-2}<0$	$x<\frac{3-\sqrt{41}}{4} \cup \frac{3+\sqrt{41}}{4}<x<\frac{8}{3}$
9	$\sqrt{2x^2-4x}-\frac{\lvert x+1\rvert}{2}\geq 0$	$x\leq \frac{9-2\sqrt{22}}{7} \cup x\geq \frac{9+2\sqrt{22}}{7}$
10	$\frac{(3x^2-2)(\lvert 2x^2-1\rvert+x)}{3\sqrt{x-1}-2}>0$	$x>\frac{13}{9}$
11	$\frac{2\sqrt{\lvert x-1\rvert-x}-4x}{\lvert\lvert x\rvert-1\rvert}>0$	$x<-1 \cup -1<x<\frac{\sqrt{5}-1}{4}$
12	$\frac{4x^2-3x-1}{x-2}<1$	$x<\frac{1}{2} \cup \frac{1}{2}<x<2$
13	$\left\lvert\frac{x-\lvert x\rvert}{\sqrt{x}+2}-1\right\rvert>1$	*impossibile*
18	$\sqrt[3]{\frac{\lvert 3-2x\rvert-x}{1+3\sqrt{x}}}\leq 0$	$1\leq x\leq 3$

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19	$\frac{(\lvert x\rvert-3)\left(\sqrt{x^2-2x}+1\right)}{3-2x^2}\leq 0$	$x\leq -3\ \cup -\frac{\sqrt{6}}{2}<x\leq 0\cup x\geq 3$
25	$\sqrt{1-4x^2}>\sqrt{3-\lvert x\rvert}$	*impossibile*
26	$\sqrt[3]{\frac{2x+7}{x+1}}>3$	$-1<x<-\frac{4}{5}$
27	$\sqrt{\frac{3-\lvert 3x-1\rvert}{1+x}}>1$	$x<-1\cup -\frac{1}{2}\leq x\leq \frac{3}{4}$

sistemi di disequazioni di riepilogo

29	$\begin{cases}\frac{\lvert x+2\rvert-2\lvert x\rvert+1}{\sqrt{x-x^2}}>0\\ \frac{1}{x+2}-\frac{\lvert x\rvert}{2-x}\geq\frac{1}{x^2-4}\end{cases}$	$0<x<\frac{\sqrt{21}-3}{2}$
30	$\begin{cases}\left\lvert\frac{\sqrt{2x-1}+1}{x-1}\right\rvert>2\\ \sqrt{\frac{4x^2-1}{x\lvert x\rvert-2}}-1\geq 0\end{cases}$	$\sqrt{2}<x<\frac{5}{2}$
31	$\begin{cases}\sqrt{\lvert x-1\rvert}-\lvert 1-\sqrt{x}\rvert\leq 0\\ \frac{1-2\lvert x^2-9\rvert-2x}{x-2}+1>0\end{cases}$	$x=0\ \cup x=1$
32	$\begin{cases}\frac{1-\sqrt{x}}{\lvert x-2\rvert-\lvert x\rvert}\leq 0\\ \frac{\sqrt{x+2}}{x^2-x-6}+\frac{1}{\lvert 3-x\rvert}>\frac{1}{\lvert x+2\rvert}\end{cases}$	*impossibile*
33	$\begin{cases}\frac{2}{\lvert x\rvert}-\frac{1}{\lvert x-2\rvert}>1\\ \sqrt{3-2\lvert x\rvert}>\lvert x+1\rvert\end{cases}$	$-\sqrt{2}<x<0\cup 0<x<\sqrt{6}-2$
34	$\begin{cases}\frac{\sqrt[4]{-4+5x^2}-x}{\lvert 2+x\rvert-2\lvert x^2-1\rvert+1}>0\\ \frac{\left(1-\sqrt{2x}\right)\left(\sqrt{4x^2-1}-2\right)}{\lvert x-1+\lvert x\rvert\rvert-1}>0\end{cases}$	$1<x<\frac{\sqrt{5}}{2}$