DOMINI $f(x,y)$

$x \ln(2 + y^2/x)$ / $\arcsin\left(\frac{x+y-1}{x-y+1}\right)$

$\ln\left(\frac{x+y-1}{x-y+1}\right)$ / $\ln\left(\frac{9-x^2-y^2}{y-x}\right)$

$\sqrt{y^2-x^2}+\ln(1-x^2-y^2)$ / $\ln(x^2-y^2)$

$\sqrt{y^2-x^4}$ / $\ln(1-x^2)+\ln(1-y^2)$ / $\ln\left(\frac{1-x^2}{1-y^2}\right)$

$\sqrt{\sin\sqrt{x^2+y^2}}$ / $\sqrt{x\sin\sqrt{x^2+y^2}}$ / $\ln\left(-\ln\left[\frac{(x-1)^2+y^2}{x^2+y^2}\right]\right)$

$x\arcsin\left(\frac{x}{y}\right)$ / $\sqrt{x^2-2x+y^2-6y+5}$ / $(y-1/x)^{xy^2}$

MAX / MIN

$xy^2-x^2-y^2$ / x^2+y^2 / x^2-y^2 / x^3+y^3+xy

x^3-y^3-xy / $4y^4-16x^2y+x$ / $2(x^2+y^2+1)-(x^4+y^4)$

$(x-y)e^{-(x^2+y^2)}$ / $e^{-(x^2+y^2)}$ / $(x^2+xy+y^2)e^{x+2y}$

$\sin x\sin 2y$ / $\sin x\sin y-\cos x\cos y$ /

$(x-y)e^{y-x}$

EQUAZIONI DIFFERENZIALI

$u' - \operatorname{tg}x\, u = \operatorname{tg}x + x$ / $u' = \dfrac{u-x}{u+x}$

$u' + \dfrac{e^x}{e^x-2}\, u = x e^{-x}$ / $u' = \left(\dfrac{u-1}{u+1} - u\right)\dfrac{1}{x}$

$x^3 u' + x^2 u = 1$ / $u' + \operatorname{tg}x\, u = \dfrac{\sin x}{1+\sin x}$

$u' + \dfrac{x}{x^2-1}\, u = 0$ / $u' + \dfrac{1}{2e^x-1}\, u = x^2$

$u' + \dfrac{e^x}{x}\, u = 4/x$ / $u' - (1+2x)\, e^{-u} = 0$

$u' - x^{1/3}\, u = x^{1/3}$ / $u' - u(u-1)(x+1) = 0$

$u' = -\dfrac{\sqrt{u-u^2}}{(1-2u)}\dfrac{1}{\sqrt{x}}$ / $u' - \dfrac{1+2x}{\cos u} = 0$

$u' = \dfrac{u\sqrt{1-u^2}}{x^2}$ / $u' = \dfrac{x^2+u^2}{xu}$

$u' = \dfrac{u^3 x}{1+x^2}$ / $u' = \dfrac{1}{xu}$

$u'' - u = x e^{2x}$ / $u''' - u' = x^2 + e^x$

$u''' - u' = x \sin x$ / $u'' - 4u' + 5u = x e^{2x} \sin x$

$u'' - u = \sin x - x$ /