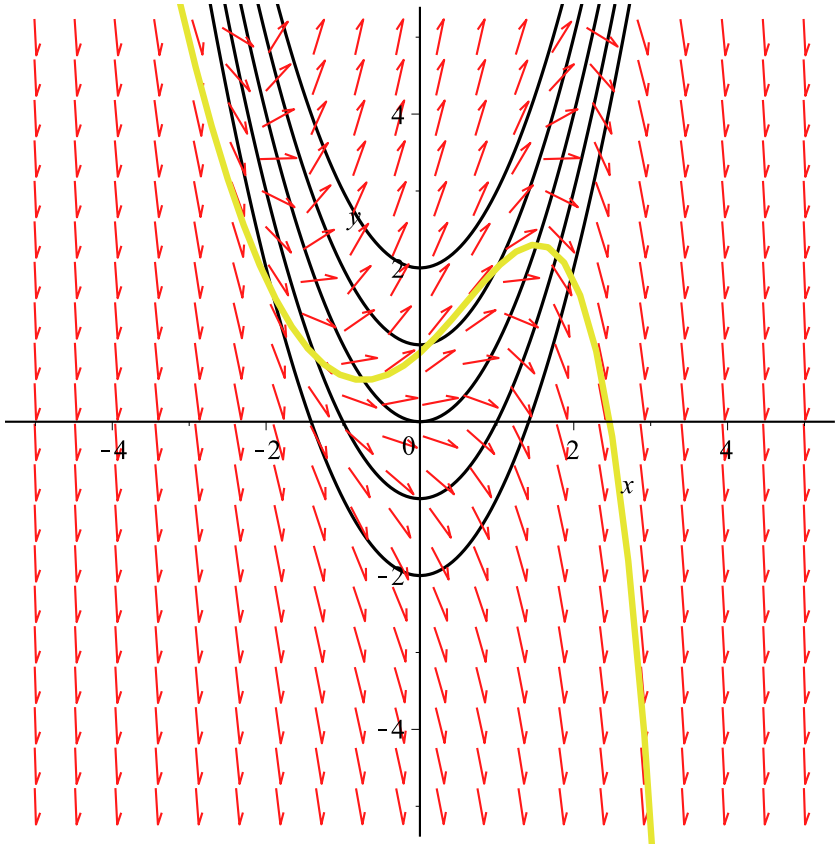
" 1 "



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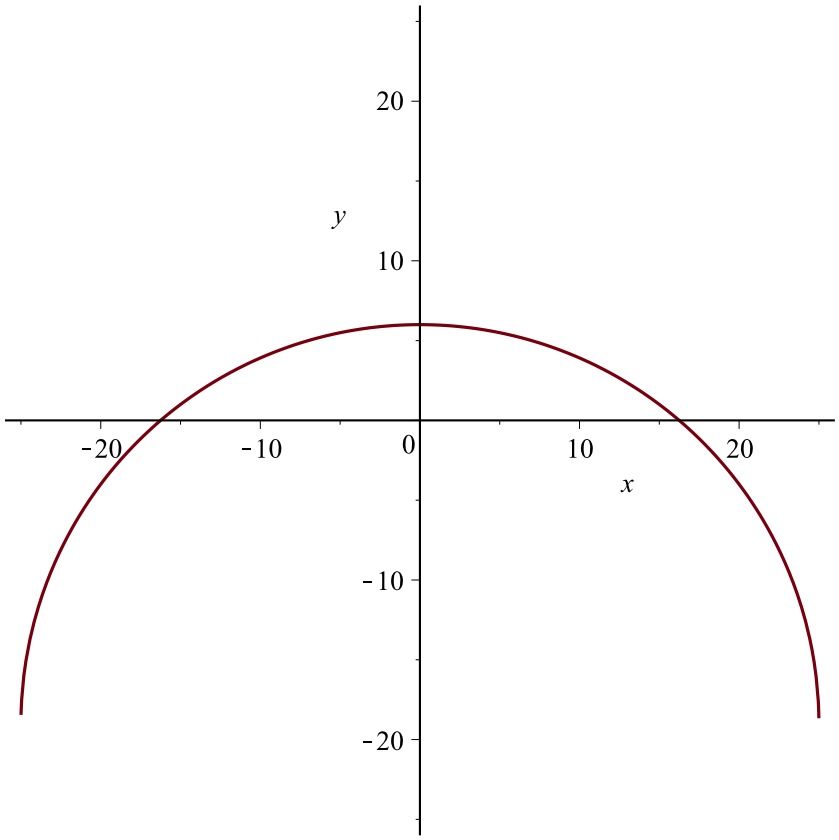
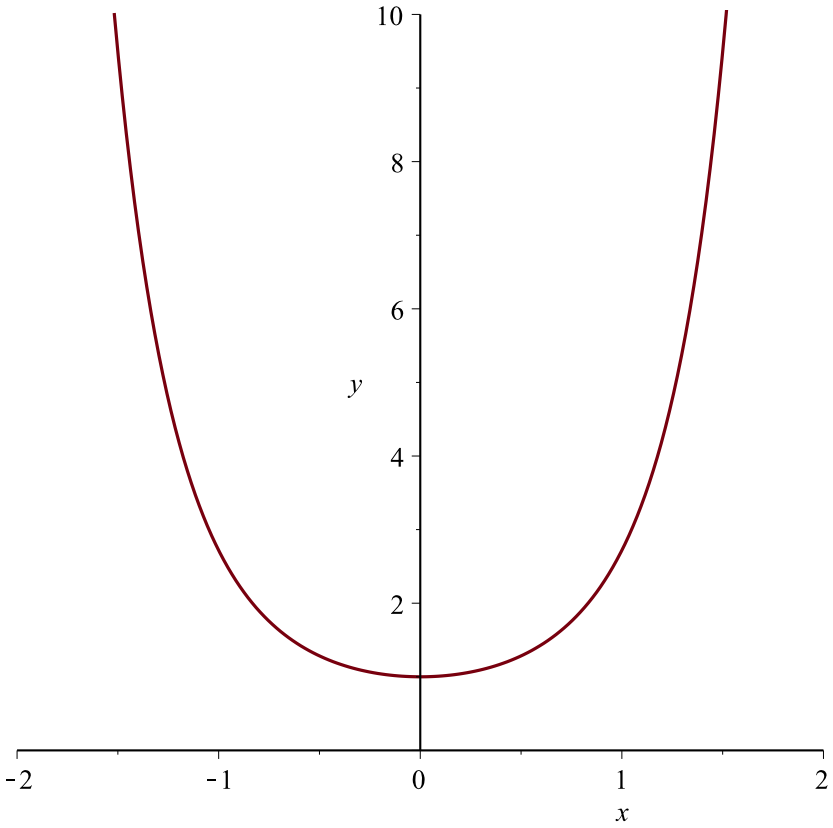
" 2 "

$$f := -\frac{(x-25)\,(x+25)}{\sqrt{-x^2+625}} - 19$$



$$f := e^{x^2}$$

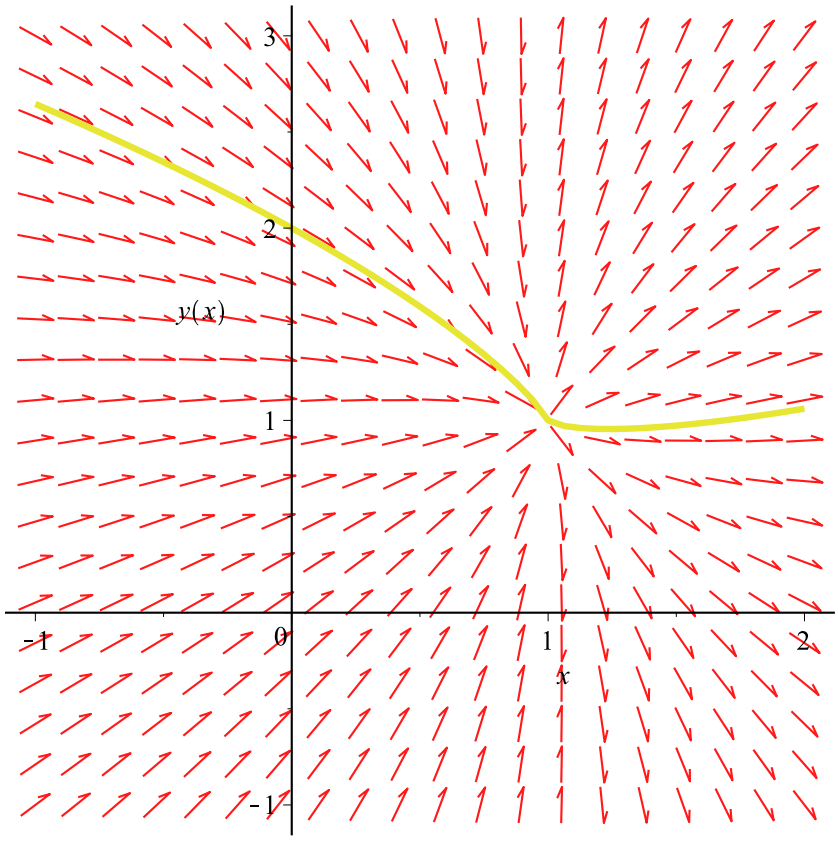


>

" 3 "

$$sol := 4\ln\left(-\frac{y(x)-5+4x}{x-1}\right)-5\ln\left(\frac{-y(x)+x}{x-1}\right)-\ln(x-1)-\_C1=0$$

$$dots := \{x=1, y=1\}$$



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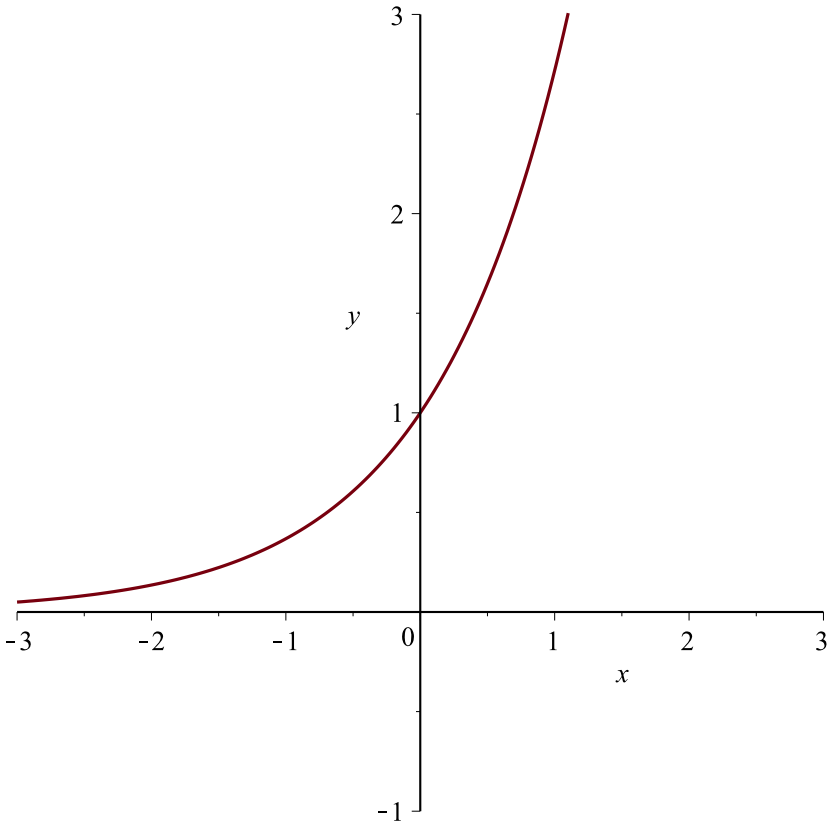
" 4 "

$$mark := D(y)(0) = 1$$

$$eq := \frac{d}{dx} y(x) + x\,y(x) = (1 + x)\,e^{-x} y(x)^2$$

$$sol := y(x) = \frac{1}{-2\,e^{\frac{1}{2}x^2} + e^{-x}}, y(x) = \frac{1}{e^{-x}}$$

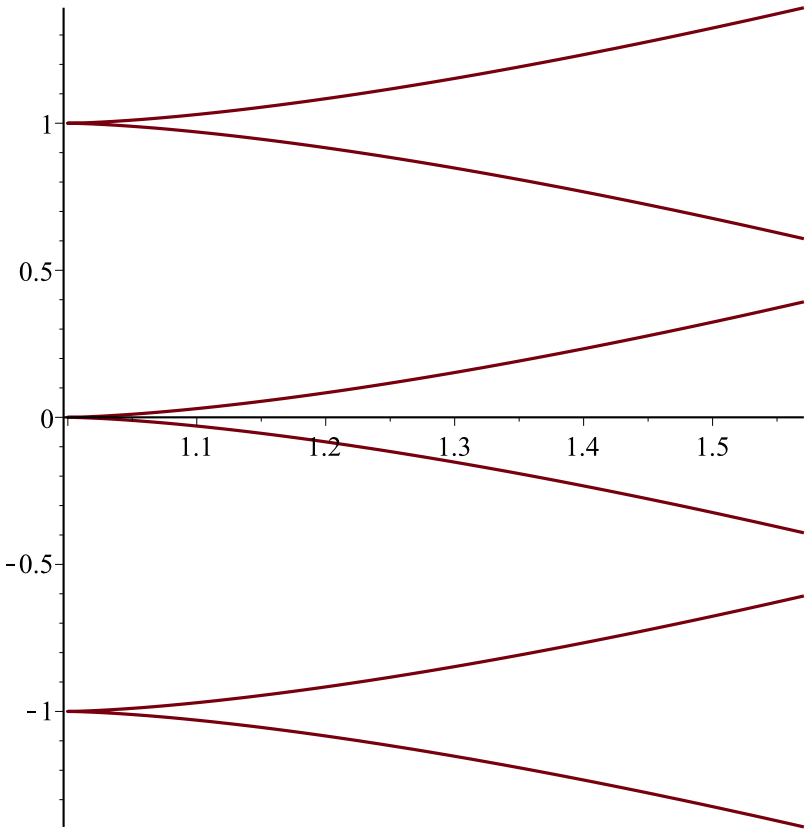
$$f := e^{x}$$



" 5 "

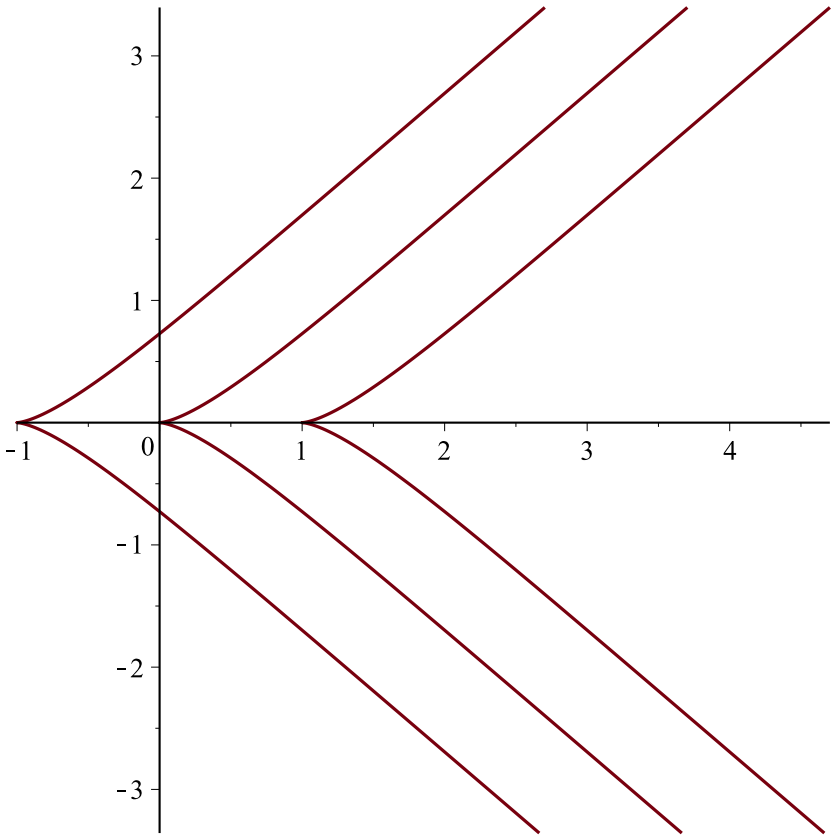
$$x := \sin(t)\ t + \cos(t)$$

$$y := -\frac{1}{2}\ \cos(t)^2\ t + \frac{1}{4}\ \sin(t)\ \cos(t) + \frac{1}{4}\ t$$



$$y := \frac{1}{2}\ln\left(\frac{1+t}{1-t}\right) - t$$

$$x := -\frac{1}{2}\ln\left(-t^2+1\right)$$



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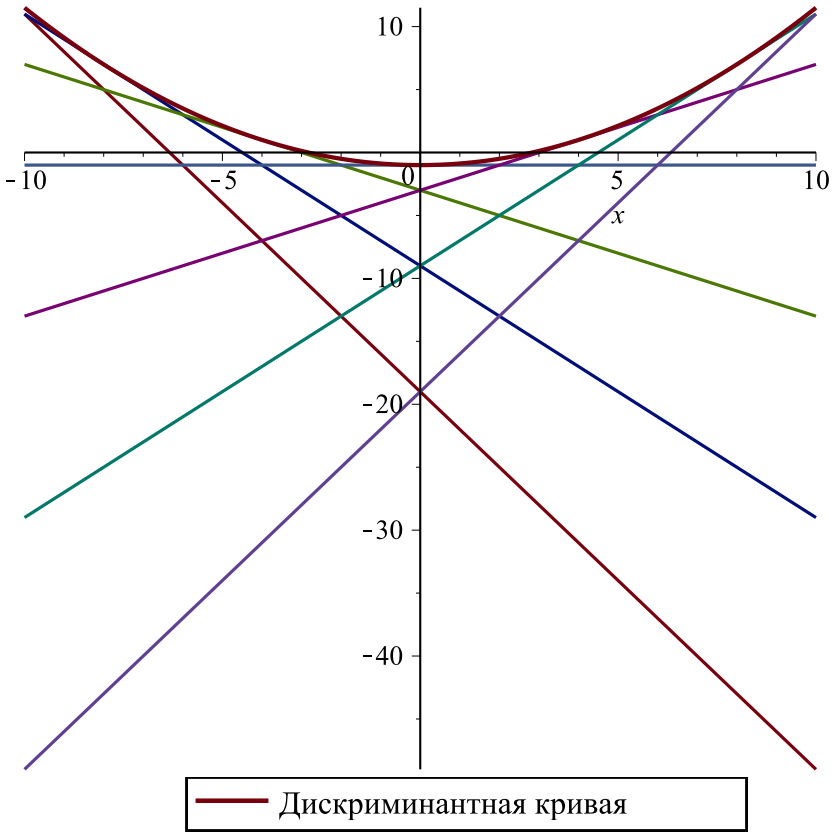
" 6 "

$$eq := y(x) = x\left(\frac{d}{dx}y(x)\right) + 2\left(\frac{d}{dx}y(x)\right)^2 - 1$$

$$sol := y(x) = -\frac{1}{8}x^2 - 1, y(x) = 2\_C1^2 + \_C1\,x - 1$$

$$int\_plots := PLOT(\ldots)$$

$$sqplt := PLOT(\ldots)$$


10
-10
-5
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Дискриминантная кривая