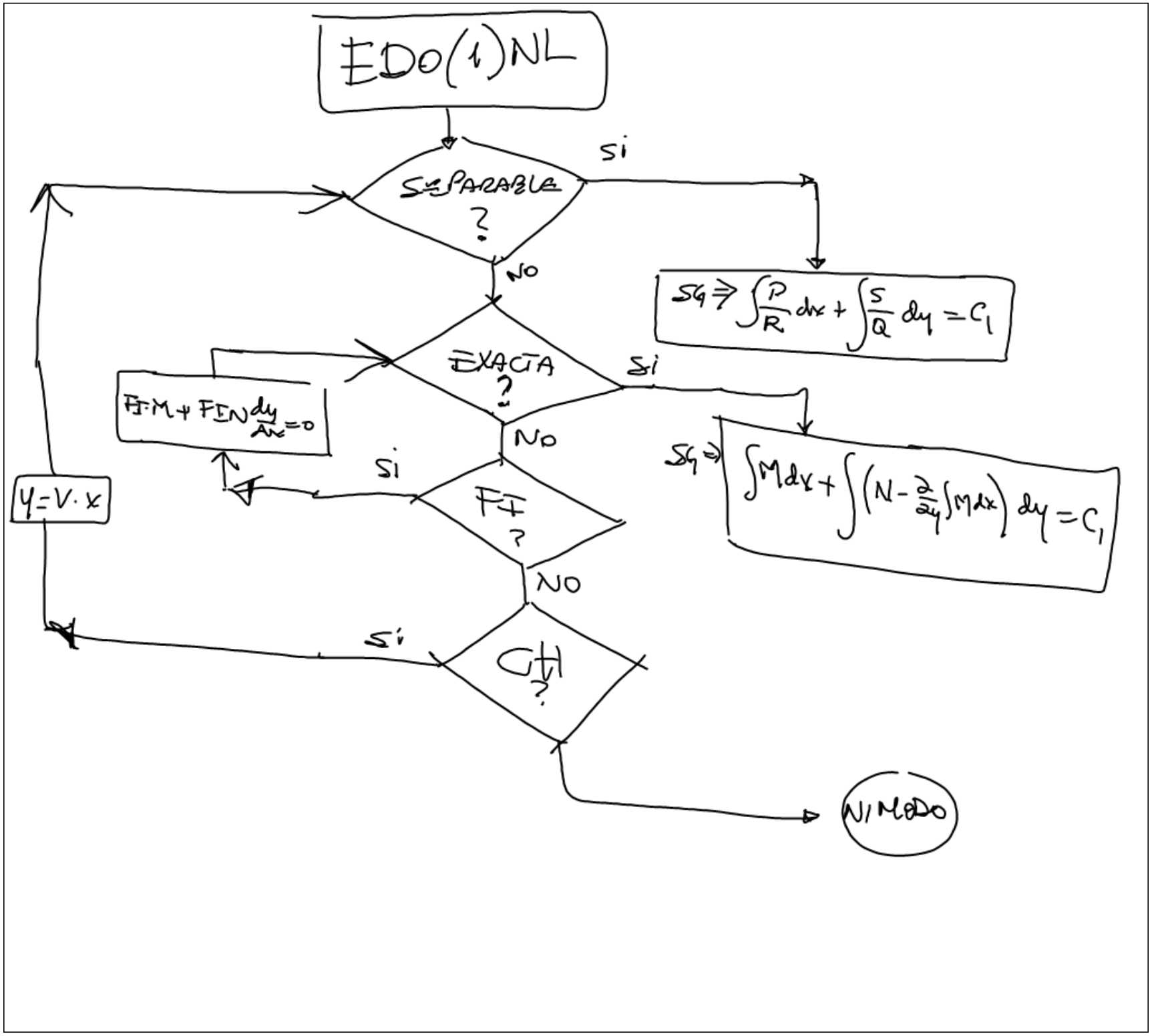
EDO(1)NL
SEPARABLE ?
si
SG ⇒ $\int \frac{P}{R} dx + \int \frac{S}{Q} dy = C_1$
No
EXACTA ?
si
FIM + FIN $\frac{dy}{dx} = 0$
No
si
FI ?
SG ⇒ $\int M dx + \int \left(N - \frac{\partial}{\partial y}\int M dx\right) dy = C_1$
No
y = V · x
si
GH ?
N/MODO

$$(4x^2+xy-3y^2)\,dx+(-5x^2+2xy+y^2)\,dy=0$$

$$(4x^2+xy(x)-3y(x)^2)+(-5x+2xy(x)+y(x)^2)\frac{dy}{dx}=0$$

$$4x^2+xy-3y^2+(-5x^2+2xy+y^2)\,y'=0$$

$$y(x)=V(x)\cdot x \qquad \frac{dy}{dx}=V(x)+x\frac{dV}{dx}$$

$$4x^2-x(Vx)-3(Vx)^2+(-5x^2+2x(Vx)+(Vx)^2)\left(V+x\frac{dV}{dx}\right)=0$$

$$4x^2-x^2V+3V^2x^2+(-5x^2+2x^2V+V^2x^2)\left(V+x\frac{dV}{dx}\right)=0$$

$$4x^2-x^2V+3V^2x^2-5x^2V+2x^2V^2+x^2V^3+\left(-5x^3+2x^3V+x^3V^2\right)\frac{dV}{dx}=0$$

$$4x^2-6x^2V+5x^2V^2+x^2V^3+x^3\left(-5+2V+V^2\right)\frac{dV}{dx}=0$$

$$x^2\left(4-6V+5V^2+V^3\right)+x^3\left(-5+2V+V^2\right)\frac{dV}{dx}=0$$

$$\int\frac{dx}{x}+\int\left(\frac{-5+2V+V^2}{4-6V+5V^2+V^3}\right)dV=C$$

Solución General.