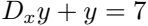


$$v = \sqrt{2x + 2} + \sqrt{2x + 2} + \sqrt{2x + 2}$$



ad

+

P

o

o

=

o

o

1. $\frac{d}{dx} x^2 = 2x$

$$D_x y = \frac{dy}{dx} = y(1-y) \Leftrightarrow \frac{dy}{y(1-y)} = dx \Leftrightarrow \int \frac{dy}{y(1-y)} = \int dx \Leftrightarrow u = 1 - \frac{1}{y} \Rightarrow -\int \frac{1}{u} du = x + C \Leftrightarrow -\ln|u| = \ln\left|1 - \frac{1}{y}\right| = x + C \Leftrightarrow \ln\left|1 - \frac{1}{y}\right| = x + C$$



$$1 - \frac{1}{y} = e^{-x+C} \Rightarrow 1 = e^{-x+C} y - y = y(e^{-x+C} - 1) \Rightarrow y = \frac{1}{e^{-x+C} - 1}$$



$$D_x y + P(x)y = Q(x)$$

$$\Leftrightarrow \mu(x)(D_x y + P(x)y) = D_x(\mu(x)y)$$

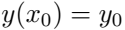
$$\Leftrightarrow \mu(x)D_x y + \mu(x)P(x)y = \mu(x)D_x y + D_x \mu(x)y$$

$$\Leftrightarrow \mu(x)P(x) = D_x \mu(x)y$$

$$P(x) = \frac{\mu_x(x)}{\mu(x)} = \frac{d\mu}{\mu} \Rightarrow \int P(x)dx = \int \frac{d\mu}{\mu} = \ln \mu \Rightarrow \mu(x) = e^{\int P(x)dx}$$



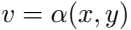






$$y(x) = e^{-\int P(x) dx} \left(\int e^{\int P(x) dx} Q(x) dx + C \right)$$









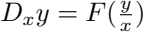
Deuxième partie

www.DrDx.com

explore + explore

$$v = D_x v = D_x^2 v = D_x^3 v + v = Q(x)$$

$$v = yD_x y \Rightarrow D_x v = (D_x y)^2 + yD_x^2 y \Rightarrow D_x v = 0 \Rightarrow yD_x y = y \frac{dy}{dx} = v = c \Rightarrow \int y dy = \int c dx + C$$





$$v = \frac{v}{x} \Rightarrow D_x v = D_x \left(\frac{v}{x} \right) + v$$

$$v^x + v = \sqrt{v} \Rightarrow \frac{D_x v}{\sqrt{v}} = \frac{1}{x}$$

Handwritten text: "Handwritten text" followed by a horizontal line and "Handwritten text".

$$v = w \rightarrow \frac{dx}{x} = \frac{h}{w} \frac{dw}{w} \rightarrow$$

[illegible]

$$v = y^{1-n} \Rightarrow D_x v = (1-n)y^{-n} D_x y = D_x y + (1-n)P(x) y = (1-n)Q(x)$$

Der Preis der Waren

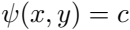
$$I(x, y) + I(x, y) D_x = 0 \Rightarrow I(x, y) dx + I(x, y) dy = 0$$





$$\psi_x(x, y) = I(x, y)$$

$$\psi_y(x, y) = J(x, y)$$





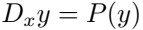












Deuxième

$$D_x y = \frac{dy}{dx} = f(x)g(y) \Rightarrow \int \frac{dy}{g(y)} = \int f(x) dx + C$$

$$0.2x + 0.2x + 0.2x + 0.2x = 0$$





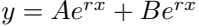


$$a(r^2 e^{rx}) + b(re^{rx}) + ce^{rx} = 0$$

$$\Leftrightarrow e^{rx}(ar^2 + br + c) = 0$$

$$\Leftrightarrow ar^2 + br + c = 0$$









W E A P O N S + D E S I G N S

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

$\frac{1}{2} \ln \frac{1+x}{1-x} = \frac{1}{2} \ln \frac{1+x}{1-x}$

$$v = (v_1 v_2)^+ = v_1 v_2^+$$













1990

Praxiparox + codeine

Handwritten text in a cursive script, likely a signature or name, rendered in a pixelated, black and white format. The text is highly stylized and difficult to decipher, but appears to be a single line of writing.





Dearest Mother,

I have just received your letter of the 14th and was so glad to hear from you. I am well and hope this finds you the same. I am writing you now as I am alone and have time to do so. I am so glad to hear that you are all well and happy. I am so glad to hear that you are all well and happy. I am so glad to hear that you are all well and happy.

1991 = 991

0123456789+abcdefghijklmnopqrstuvwxyz

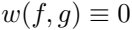


$$\frac{dx}{dt} + \frac{dx}{dt} = 0$$

$$D(x_1)D(x_2) + D(x_1)D(x_2) = D(x_1)D(x_2)$$

www.dj

$$w(f, g) := \left| \begin{array}{cc} f & g \\ D_x f & D_x g \end{array} \right|$$



www.oxfordjournals.org



A row of six grayscale images showing handwritten digits 0 through 5. Each digit is rendered with a noisy, pixelated appearance, characteristic of a low-resolution or corrupted scan. The digits are arranged horizontally from left to right: 0, 1, 2, 3, 4, and 5.

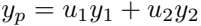


www.fox.com

$$D(x, v_1) = \frac{-v_2}{v(v_1, v_2)}$$

A pixelated, black and white representation of a mathematical equation. The equation is displayed in a single line, with the left side being $D(x, v_2)$ and the right side being $\frac{v_1 v_2}{v(v_1 v_2)}$. The characters are rendered in a blocky, digital font. The equals sign is represented by two horizontal lines. The variables x , v_1 , v_2 , and v are shown in a stylized, pixelated manner. The entire image has a low-resolution, dithered appearance.

$$D(x, v_2) = \frac{v_1 v_2}{v(v_1 v_2)}$$



$$\begin{aligned}
 y_p &= -y_1(x) \int_{x_0}^x \frac{y_2(s)g(s)}{w(y_1, y_2)(s)} ds + y_2(x) \int_{x_0}^x \frac{y_1(s)g(s)}{w(y_1, y_2)(s)} ds \\
 &= \int_{x_0}^x \frac{y_2(x)y_1(s) - y_1(x)y_2(s)}{w(y_1, y_2)(s)} g(s) ds = 0
 \end{aligned}$$







$$a_0 D^n x + a_1 D^{n-1} x + \dots + a_{n-1} D x + a_n x = 0$$

$$y = e^x \Rightarrow a_0 x^0 + a_1 x^{-1} + \dots + a_{n-1} x + a_n = 0$$

$$D_t x_i = \sum_{j=1}^n (P_{ij}(t) x_j) + g_i(t)$$





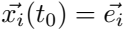
$$D_t \vec{x} = [P_{ij}(t)]_{ij} \vec{x} = \begin{bmatrix} g_1(t) \\ \vdots \\ g_n(t) \end{bmatrix}$$

Q. E. = O. V.











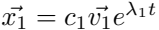






$$\vec{x} = \sum_{i=1}^n c_i e^{\lambda_i} \vec{v}_i$$





2 = 2 + 2



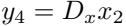
1234567890

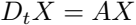
$$x_1 = x, x_2 = D x \Rightarrow D x_2 = -b x_1, D x_1 = x_2$$



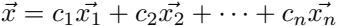


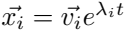






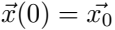
WAVELENGTH

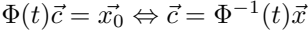


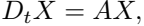




$$X = \Phi(\psi) = \begin{bmatrix} x_1 & x_2 & \dots & x_n \end{bmatrix}$$







Wish you were here



$$e^x = \sum_{n=0}^{\infty} \frac{x^n}{n!} \Rightarrow e^A = \sum_{n=0}^{\infty} \frac{A^n}{n!} \Rightarrow e^{At} = \sum_{n=0}^{\infty} \frac{A^n t^n}{n!}$$



$$e^{A+B} = e^A e^B, \quad (e^A)^{-1} = e^{-A}, \quad e^{0 \in M_n(\mathbb{R})} = I$$

Adapted from





24

11

20

2011





$$e^A = \sum_{i=0}^n \frac{A^i}{i!}$$

$$= \sum_{n=0}^{\infty} \frac{A^n}{n!}$$

$$A = \begin{bmatrix} 0 & 1 & 2 \\ 0 & 0 & 3 \\ 0 & 0 & 0 \end{bmatrix}$$



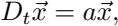
$$A^3=0\Rightarrow e^A=\sum_{i=0}^2\frac{A^i}{i!}=(A^0=I)+A+\frac{1}{2}A^2$$



PLEASE
ENTER
YOUR
NAME



ABBA ABBA ABBA ABBA ABBA



WALLS

$(\Phi(\Phi^{-1}(x)) = x)$ $(\Psi(\Psi^{-1}(x)) = x)$