

Rozwiąż równania postaci $g(y)dy = h(t)dt$

- $y' = 2t + 1$
- $y' = \cos t$
- $y' = \frac{y}{t}, y(1) = 1$
- $y' = y + 1$
- $y' = y - 2$
- $y' = 2e^{2t}, y(0) = 2$
- $y' = \frac{e^t}{y}$
- $y' = 2yt$
- $y' = \frac{t}{y}, y(0) = 1$
- $y' = 4y^2t^3$
- $y' = \frac{y}{t^2}$
- $y' = te^t, y(0) = 1$

Rozwiąż równania postaci $\frac{dy}{dt} + yp(t) = q(t)$

- $\frac{dy}{dt} + \frac{y}{t} = 1$
- $\frac{dy}{dt} - y = e^t$
- $\frac{dy}{dt} - y = e^t \cos t$
- $\frac{dy}{dt} + \frac{y}{t} = \frac{1}{t}$
- $\frac{dy}{dt} - y = e^{2t}$
- $\frac{dy}{dt} - y = e^{-t}$
- $\frac{dy}{dt} + \frac{y}{t} = \frac{e^t}{t}$
- $\frac{dy}{dt} - y = e^t t$
- $\frac{dy}{dt} - y = -e^t \sin t$
- $\frac{dy}{dt} + y = te^{-t}$
- $\frac{dy}{dt} + y = e^{2t} t$
- $\frac{dy}{dt} + y = 3t^2 e^{-t}$

Rozwiąż zagadnienia początkowe z zastosowaniem transformaty Laplace'a

- $\frac{dy}{dt} - 2y = 4t, y(0) = 0$
- $\frac{dy}{dt} + 2y = 2, y(0) = -2$
- $\frac{dy}{dt} - y = e^t, y(0) = 1$
- $\frac{dy}{dt} + 3y = t, y(0) = 0$
- $\frac{dy}{dt} - 3y = 3, y(0) = -1$
- $\frac{dy}{dt} + 2y = e^{-t}, y(0) = 2$
- $\frac{dy}{dt} - 3y = e^{2t}, y(0) = 1$
- $\frac{dy}{dt} + y = 2t, y(0) = 0$
- $\frac{dy}{dt} - y = 1, y(0) = -3$
- $\frac{dy}{dt} - 4y = 3e^t, y(0) = 0$
- $\frac{dy}{dt} - y = 2 - 2t, y(0) = 1$
- $\frac{dy}{dt} - 3y = -5e^{2t}, y(0) = 0$

Rozwiąż równania postaci $P(t, y) + Q(t, y)\frac{dy}{dt} = 0$

- $y - 2t + (t + 2y)\frac{dy}{dt} = 0$
- $2t - y - (2y + t)\frac{dy}{dt} = 0$
- $2y + t + (4y + 2t)\frac{dy}{dt} = 0$
- $t - 4y - (4t - 2y)\frac{dy}{dt} = 0$
- $8t - 2y - (2t - 6y)\frac{dy}{dt} = 0$
- $4t - 2y + (2y - 2t)\frac{dy}{dt} = 0$
- $2y - 3t^2 + (2t - 6y^2)\frac{dy}{dt} = 0$
- $6t + 2y + (3y^2 + 2t)\frac{dy}{dt} = 0$
- $2ty - 2t + (t^2 + 2y)\frac{dy}{dt} = 0$

Rozwiąż równania postaci $ay''(t) + by'(t) + cy(t) = q(t)$

- $y'' - 4y' + 5y = 0$
- $y'' - y' - 6y = 12e^t$
- $y'' + y = t$
- $y'' + 8y' + 16y = 0$
- $y'' - 4y = -8t$
- $y'' + y = -2t + 2$
- $y'' - 16y = 0$
- $y'' - 9y = 9t + 9$
- $y'' - 4y = -8t$
- $y'' - 4y' + 3y = 3t - 7$
- $y'' - y = 6e^{2t}$
- $y'' - 9y = 9t + 9$
- $y'' - 3y' - 4y = 8t - 10$
- $y'' + y = -2e^t$
- $y'' - y = 6e^{2t}$

Rozwiąż zagadnienia początkowe

- $y'' - 2y' = e^t, \quad y(0) = 0, y'(0) = 1$
- $y'' - y' = 4e^{-t}, \quad y(0) = 3, y'(0) = -1$
- $y'' - 3y' = 4e^t, \quad y(0) = -1, y'(0) = 1$
- $y'' + y' - 6y = 18e^{-t}, \quad y(0) = -2, y'(0) = 5$
- $y'' + 2y' + y = -t, \quad y(0) = 2, y'(0) = -1$
- $y'' + 4y' - 4y = -4t, \quad y(0) = -1, y'(0) = 1$
- $y'' - 3y' + 2y = 4t, \quad y(0) = 3, y'(0) = 2$
- $y'' - y' - 2y = -12t - 6, \quad y(0) = 0, y'(0) = 2$
- $y'' + 5y' + 4y = -8t - 18, \quad y(0) = 1, y'(0) = 1$