

Rozwiązać równania różniczkowe

$$y' - \frac{y}{x} = -\ln x,$$
$$y'' - 3y' + 2y = x^3.$$

$$(1 + x^2)y' = 2xy,$$
$$y'' - 4y = 10e^{3x}.$$

$$(2xy^3 + 8x)dx + (3x^2y^2 + 5)dy = 0,$$
$$y'' + y' - 6y = 2\sin x.$$

$$(1 + x^2)y' + y = \operatorname{arctg} x,$$
$$y'' + y' = \cos x.$$

$$y' = \frac{y}{x} - x,$$
$$y'' - 3y' + 2y = x.$$

$$y' = \frac{y}{x} - x,$$
$$y'' - 3y' + 2y = x.$$

$$y' \cos x - y \sin x = 1,$$
$$y'' + 4y = xe^{2x}.$$

$$y' \cos x - y \sin x = 1.$$

$$y'' + y = \cos 2x - \sin 2x.$$