



Differential Equations
Homogeneous Differential Equation
Practice Problems

Solve the following Differential Equations:

$$1. \frac{dy}{dx} = \frac{x+y}{x-y}$$

$$2. \frac{dy}{dx} = \frac{y^2-x^2}{x^2}$$

$$3. \frac{dy}{dx} = \frac{y^2+x^2+2xy}{x^2}$$

$$4. ydx + xdy = \sqrt{y^2 + x^2} dx$$