

Hwk Differential Equations/Seperation of Variables Date _____ Period _____

Find the general solution of each differential equation.

1) $f'(x) = -2\sin x$

2) $\frac{dy}{dx} = \frac{2}{x}$

For each problem, find the particular solution of the differential equation that satisfies the initial condition.

3) $\frac{dy}{dx} = -4x + 1, y(-1) = -1$

Find the general solution of each differential equation.

4) $\frac{dy}{dx} = \frac{2x}{y^2}$