

Suggested problems 4

Instructor: Alena Erchenko

1. Find the general solution of the given first order ODE. Give the answer in an explicit form.

a) $y' = t^2 \sqrt{y}$

b) $e^y \frac{dy}{dx} - 3x^2 + 4x = 0$

2. Solve the following initial value problem

$$y' = y - y^2, \quad y(1) = 2.$$

How would the answer change if the initial condition is set $y(1) = 1$?