

Worksheet
3/11/2019

Solve the following initial value problems:

(a) $y' = y(4t^3 + 1), \quad y(0) = 4$

(b) $\frac{dy}{dt} = e^{t-y}, \quad y(0) = \ln 3$

(c) $\frac{dy}{dt} = \frac{3t^2}{y}$ (Your answer should contain an undetermined constant.)

(d) $y' = y(1 - y), \quad y(0) = \frac{1}{2}$