

2013-04-13

1.  $\frac{dy}{dx} = \frac{y^2}{x} \quad y(1) = 1$

$$\frac{1}{y^2} dy = \frac{1}{x} dx$$

$$-\frac{1}{y} = \ln x + C$$

$$-1 = 0 + C \Rightarrow C = -1$$

$$-\frac{1}{y} = \ln x - 1$$

$$y = \frac{1}{1 - \ln x}$$

2.