9. (10 points) Find the solution of the initial value problem

$$\frac{dy}{dt} = \frac{1}{ye^{t/2}}, \quad y(0) = -1.$$

Give your answer in the form $y = f(t)$.

9. (10 points) Find the solution of the initial value problem

$$\frac{dy}{dx} = \frac{(x+3)(y+2)}{x^2+9}, \quad y(0) = 10.$$

Give your answer in the form $y = f(x)$.

9. (10 points) Find the solution of the initial value problem

$$\frac{dy}{dt} = t\,\sin(t)\,\cos^2(y), \quad y(0) = \frac{\pi}{4}.$$

Give your answer in the form $y = f(t)$.