Quiz 1 427J

1. Consider the O.D.E.

$$\frac{dy}{dt} + y = te^t$$

   (a) What is the integrating factor, $\mu(t)$?

   (b) Use $\mu(t)$ to solve the O.D.E.

   (c) Use your solution in part b to solve the I.V.P.

$$\frac{dy}{dt} + y = te^t, \quad y(0) = -1/4$$