

InsmatD Demo 6

1 Demo 6 19.2.2018

1.1 7.

$$\begin{aligned}y' &= (x+1)(y+1) \Leftrightarrow \frac{dy}{dx} = (x+1)(y+1) \\&\Leftrightarrow \frac{1}{y+1} dy = (x+1) dx \\&\Leftrightarrow \int \frac{1}{y+1} dy = \int (x+1) dx + C \\&\Leftrightarrow \ln(y+1) = \frac{1}{2}x^2 + x + C \\&\Leftrightarrow y+1 = e^{\frac{1}{2}x^2 + x + C} \\&\Leftrightarrow y = e^{\frac{1}{2}x^2 + x + C}\end{aligned}$$