

$$\begin{array}{r|l} D & I \\ \hline + & -3x \\ - & -3 \\ + & 0 \end{array} \begin{array}{l} e^{-3x} \\ -\frac{1}{3}e^{-3x} \\ \frac{1}{9}e^{-3x} \end{array}$$

$$\frac{e^{-3x} u}{e^{-3x}} = \frac{x e^{-3x} + \frac{1}{3} e^{-3x} + C}{e^{-3x}}$$

$$u = x + \frac{1}{3} + \frac{C}{e^{-3x}}$$

$$\frac{1}{z^3} = x + \frac{1}{3} + C e^{3x}$$

$$z^3 = \frac{1}{x + \frac{1}{3} + C e^{3x}}$$

$$z = \sqrt[3]{\frac{3}{3x + 1 + C e^{3x}}}$$