

$$A = -B$$

$$2(-B) + 3B = 0.1$$

$$-2B + 3B = 0.1$$

$$B = 0.1$$

$$A = -B$$

$$A = -0.1$$

$$A = -0.1 \quad \text{and} \quad B = 0.1$$

$$x = -0.1e^{-2t} + 0.1e^{-3t} + \frac{1}{10}(\cos t + \sin t)$$