

$$\underline{y} + 16y = \begin{cases} \cos 4t & 0 \leq t < \pi \\ 0 & t \geq \pi \end{cases} / y(0) = 0 / \underline{y}(0) = 1: \quad y = \frac{\sin 4t}{4} + \frac{t \sin 4t}{8} - \frac{(t - \pi) \sin 4(t - \pi) u_{\pi}(t)}{8}$$

$$\underline{y} + y = \begin{cases} 1 & 0 \leq t < 1 \\ t & t \geq 1 \end{cases} / y(0) = 1 / \underline{y}(0) = 2: \quad y = 1 + u_1(t)(t - 1 - \sin(t - 1)) + 2 \sin t$$