Linear Circuits and Systems

Solving Second-Order Ordinary Differential Equations – Part 2 of 2

Course: Linear Circuits and Systems
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Example

- Solve

$$2\frac{d^2y}{dt^2} + 3\frac{dy}{dt} + 3.125y = \text{sint},$$
$$y(0) = 5,\ \frac{dy}{dt}(\text{t} = 0) = 3$$

Homogenous Solution

Particular Solution

$$2\frac{d^2y}{dt^2} + 3\frac{dy}{dt} + 3.125y = \sin t,$$

Particular Solution


Complete exact solutoin

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