DECA Chapter 3 Test
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1. Find the general solution of $y'' + 5y' + 6y = 0$

2. Find the solution of the initial value problem

$$4y'' - 8y' + 3y = 0, \qquad y(0) = 2, \qquad y'(0) = \frac{1}{2}$$

3. Find the longest interval in which the solution of the initial value problem exists.

$$(t^2 - 3t)y'' + ty' - (t+3)y = 0, \quad y(1) = 2, \quad y'(1) = 1$$