Written Assignment #8: 
Higher-Order Linear Equations 
Due 5:00pm Tuesday, October 21, 2003

You are encouraged to collaborate with your colleagues. For credit, however, your final write-up must be done individually. Show all your work and make your presentation comprehensible.

Find the general solution to the following higher-order differential equations.

1. \( y^{(4)} + 6y'' + 9y = 0 \).

2. \( \frac{dy^3}{dx^3} - \frac{dy}{dx} = 4 \cos(2x) \).