Quiz 7b Calculus 2 4/19/04

Each problem is worth 5 points. For full credit provide proper justification for your answer.

1. Find a **general** solution to the differential equation $y'' + y' - 6y = 0$.

2. If you know that the differential equation $y'' + 3y' + 2y = 0$ has the general solution $y = ae^{-t} + be^{-2t}$, find a **particular** solution that satisfies the conditions $y(0) = 0$ and $y'(0) = 1$.