## Quiz $4 \quad$ Calculus $2 \quad$ 10/24/2006

Each problem is worth 5 points. Clear and complete justification is required for full credit.

1. Determine whether $y=e^{3 t}$ is a solution to the differential equation $y^{\prime \prime}-5 y^{\prime}+6 y=0$.
2. Use Euler's Method with step size $\Delta x=0.5$ to approximate $y(2)$ for the differential equation $y^{\prime}=y$ $-2 x$ if $y(1)=0$.
