## Quiz $5 \quad$ Calculus 2 3/7/2008

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

1. For what values of $k$ does the function $y=\cos k t$ satisfy the differential equation $y^{\prime \prime}+4 y=0$ ?
2. Is $y=t e^{-t}$ a solution to $y^{\prime \prime}+2 y^{\prime}+y=0$ ?
