

NAME.....

MAT 274, summer 2009,
Quiz 12

1. (12 pts) Find the general solution (**in real form**) to the problem

$$Y' = \begin{pmatrix} 3 & 2 \\ -4 & -1 \end{pmatrix} Y$$

2. (10 pts) Use Euler's method with step size $h = 0.5$ to find an approximate value of $y(1)$ if y is the solution of

$$y' = +y(1 + 3t^2)$$

with initial condition $y(0) = 1$