

QUIZ #21, 11/6/07

MATH 54, FALL 2007

Show your work and justify your answers! Feel free to use both sides.

Name:

- (7 pts) (a) Find all eigenvalues of $\begin{bmatrix} 1 & 1 \\ -10 & -1 \end{bmatrix}$. (You may express your answer in polar form or in coordinates.)
(b) Choose one of your eigenvalues from (a) and find its associated eigenvector(s).
- (3 pts) Find the general solution to $y'' + 3y' + 2y = 0$.