Calculate the eigenvalues of $A = \begin{bmatrix} -7 & 4 \\ -12 & 7 \end{bmatrix}$.

(a) $\pm 1$
(b) $\pm 7$
(c) $\pm \sqrt{48}$
(d) $4, -12$.
(e) None of these are correct.
The eigenvalues of $A$ are $3$, $-7$ and $8i$. What is the dominant eigenvalue?

(a) $3$
(b) $7$
(c) $8i$
(d) $8$
(e) It doesn’t have one.
How could the power method fail to converge to the dominant eigenvector?