MATH 200B, DUE 01/27.

- (1) Prove that $A \in M_n(\mathbb{C})$ is similar to its transpose A^t .
- (2) Find all similarity classes of 6×6 matrices over \mathbb{C} satisfying $A^6 = 0$.
- (3) Section 12.2: 8, 10.
- (4) Section 12.3: 2, 6, 9, 19, 21, 30, 32.

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