

Hints for Homework #3

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Hint for 4: One way to prove that two subspaces of a finite-dimensional vector space are equal is to show that they have the same dimension and one contains the other.

Hint for 5(a): Show that each entry of $[A^*]_\beta$ is equal to the corresponding entry of $[A]_\beta^*$. This can be deduced directly from the equation defining A^* for suitably chosen x and y .