Name: $\qquad$ R. Hammack Score: $\qquad$

Directions: Please answer all questions in the space provided.
Use of calculators or any form of electronic communication device is strictly forbidden on this quiz.

1. Suppose $A$ is a fixed $2 \times 2$ matrix. Show that the set $W=\{X: A X=X A\}$ is a subspace of $M_{2,2}$.
