

Name: _____

R. Hammack

Score: _____

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. In this problem $M_{3,3}$ denotes the set of 3×3 matrices and O denotes the 3×3 zero matrix. Also, A is a fixed 3×3 matrix.

Consider the set $W = \{X \in M_{3,3} : AX = O\} \subseteq M_{3,3}$.

Is W a subspace of $M_{3,3}$? Explain why, or why not.