Name: $\qquad$ R. Hammack

Score: $\qquad$

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

1. In this problem $A=\left[\begin{array}{ll}w & x \\ y & z\end{array}\right]$ and $B=\left[\begin{array}{rr}1 & 1 \\ -1 & 1\end{array}\right]$. Find the conditions on $w, x, y$ and $z$ such that $A B=B A$.
