## Mathematical Physics II

## **PHYS 502**

Problem Set # 1
Distributed January 4, 2016
Due January 8, 2016

**1.** Here is a  $3 \times 2$  matrix:

 $\left[\begin{array}{cc} 1 & 2 \\ 3 & 4 \\ 5 & 6 \end{array}\right]$ 

Diagonalize it.