**6D Inverse of 2×2 Matrices**

**= I**

1. For each of the matrices below, determine if they are singular and if they are not, find their inverse:
2. **A** and **B** are 2 x 2 non-singular matrices such that **BAB** = **I**.
3. Prove that **A** = **B**-1**B**-1
4. Given that:

Find the matrix **A** such that **BAB** = **I**