

MATH 240 QUIZ 2

Name: _____

Question:

If

$$A = \begin{bmatrix} 1 & 1 \\ 1 & 1 \end{bmatrix}, \quad B = \begin{bmatrix} 1 & 1 \\ 0 & 1 \end{bmatrix},$$

compute $AB + BA$.

Solution:

$$AB = \begin{bmatrix} 1 & 2 \\ 1 & 2 \end{bmatrix}, \quad BA = \begin{bmatrix} 2 & 2 \\ 1 & 1 \end{bmatrix}$$

so

$$AB + BA = \begin{bmatrix} 3 & 4 \\ 2 & 3 \end{bmatrix}.$$