MA552. Quiz 2

Compute the products AB and BA when it is possible, and explain if it is impossible: (a) $\begin{pmatrix} -1 & 1 & 1 \end{pmatrix}$

$$A = \begin{pmatrix} -1 & 1 & 1 \\ 1 & 0 & 1 \\ 0 & 1 & -1 \end{pmatrix}$$
$$B = \begin{pmatrix} 1 & 1 \\ 1 & 3 \\ 1 & 2 \end{pmatrix}$$

(b)

$$A = \begin{pmatrix} 1 & 2 \\ 3 & 1 \end{pmatrix}$$
$$B = \begin{pmatrix} -1 & 3 \\ 1 & 1 \end{pmatrix}$$