PRINT Your Name:_____

Write out the multiplication table for the following set of matrices over $\mathbb{Q}$:

$$A = \begin{bmatrix} 1 & 0 \\ 0 & 1 \end{bmatrix}, \quad B = \begin{bmatrix} -1 & 0 \\ 0 & 1 \end{bmatrix}, \quad C = \begin{bmatrix} 1 & 0 \\ 0 & -1 \end{bmatrix}, \quad \text{and} \quad D = \begin{bmatrix} -1 & 0 \\ 0 & -1 \end{bmatrix}.$$

ANSWER:

	A	B	C	D
A	A	B	C	D
B	B	A	D	C
C	C	D	A	B
D	D	C	B	A