

1. Compute the following.

$$(a) \begin{bmatrix} a & 5 \\ 3 & 7 \end{bmatrix} \begin{bmatrix} 1 & 0 \\ 0 & 1 \end{bmatrix}$$

$$\text{answer: } \begin{bmatrix} a & 5 \\ 3 & 7 \end{bmatrix}$$

$$(b) \begin{bmatrix} a & 5 \\ 3 & 7 \end{bmatrix} \begin{bmatrix} 1 & 0 \\ 3 & 1 \end{bmatrix}$$

$$\text{answer: } \begin{bmatrix} a + 15 & 5 \\ 24 & 7 \end{bmatrix}$$

2. Give the size of the answer matrix for the calculations that are possible.

A	B	C	D	E	F	G
3 x 4	4 x 3	4 x 3	5 x 4	4 x 2	2 x 5	5 x 4

$$(a) 2DBA =$$

$$\text{answer: } 5 \times 4$$

$$(b) F(D + G) =$$

$$\text{answer: } 2 \times 4$$

$$(c) 2E + F =$$

$$\text{answer: not possible}$$