

Solutions

Each answer shows the steps, then the **result**.

2.1

- the input is a vector and the output is a vector

2.2

- multiplying their matrices

2.3

- $\begin{bmatrix} 5 \\ 2 \end{bmatrix}$

3.1 B

3.2 B

3.3

(a)

- $\begin{bmatrix} 5 \\ 2 \end{bmatrix}$

(b)

- $\begin{bmatrix} 0 \\ 7 \end{bmatrix}$

(c)

- it swaps the two components (a reflection across $y = x$)