① $A = \begin{bmatrix} 5 & 8 & 3 \\ 2 & 6 & 9 \end{bmatrix}$

② data type : numerical

$$\text{Mean} = \frac{5+8+3+2+6+9}{6}$$

Mean = 5.5

No mode

Median : 2, 3, 5, 6, 8, 9

$$\text{Median} = \frac{5+6}{2} = 5.5$$

(3) $B = \begin{bmatrix} 7 & 4 & 1 \\ 3 & 5 & 2 \end{bmatrix}$

$A+B = \begin{bmatrix} 12 & 12 & 4 \\ 5 & 11 & 11 \end{bmatrix}$

$A-B = \begin{bmatrix} -2 & 4 & 2 \\ -1 & 1 & 7 \end{bmatrix}$

$A^T = \begin{bmatrix} 5 & 2 \\ 8 & 6 \\ 3 & 9 \end{bmatrix}$

$$2A = \begin{bmatrix} 10 & 16 & 6 \\ 4 & 12 & 18 \end{bmatrix}$$

(4)

The gaming industry relies on matrices to create realistic and visually appealing 3D graphics. They are like mathematical tools that help developers manipulate and transform objects in the game world. With matrices, developers can rotate, scale, and translate objects, apply lighting and shading effects, and map textures onto 3D objects. In this way, they are able to create immersive and interactive game environments for players.