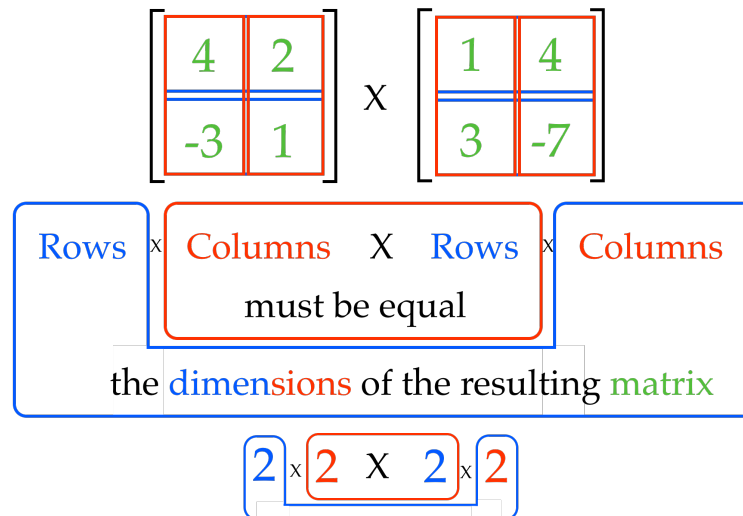


Requirements to multiply matrices



Can we multiply the following Matrices? If so,
 what are the dimensions of the resulting Matrix?

$$\begin{bmatrix} 4 & -2 & -3 \\ -1 & 7 & 9 \end{bmatrix} \times \begin{bmatrix} 4 & 2 & -3 \\ -3 & 1 & 6 \\ 5 & 4 & -3 \end{bmatrix} \quad \begin{bmatrix} 4 & 2 \\ -3 & 1 \end{bmatrix} \times \begin{bmatrix} x & 2 & -3 & 8 & 0 \\ -3 & 1 & y & 2z & 4 \end{bmatrix}$$

$$\begin{bmatrix} 4 & -2 & -3 \\ -1 & 7 & 9 \end{bmatrix} \times \begin{bmatrix} -2 & 0 \\ 4 & -5 \end{bmatrix}$$

How to Multiply Matrices

Row Entries · Column Entries

$$\begin{bmatrix} 2 & 5 \\ -2 & 4 \end{bmatrix} \times \begin{bmatrix} 3 & 1 \\ 2 & -5 \end{bmatrix} =$$



How to Multiply Matrices

Row Entries · Column Entries

$$\begin{bmatrix} 1 & -2 \\ 0 & 3 \end{bmatrix} \times \begin{bmatrix} 2 & -5 \\ 3 & -2 \end{bmatrix} =$$



How to Multiply Matrices

Row Entries · Column Entries

$$\begin{bmatrix} 2 & -4 \\ -3 & 0 \end{bmatrix} \times \begin{bmatrix} 1 & -3 & -2 \\ -3 & 6 & 8 \end{bmatrix} = \begin{bmatrix} \text{Blue Box} & \text{Red Box} & \text{Orange Box} \\ \text{Green Box} & \text{Yellow Box} & \text{Purple Box} \end{bmatrix}$$

How to Multiply Matrices

Row Entries · Column Entries

$$\begin{bmatrix} 2 & -3 & -5 \\ -4 & 6 & 8 \end{bmatrix} \times \begin{bmatrix} 3 & 4 \\ -2 & 2 \\ 5 & 7 \end{bmatrix} = \begin{bmatrix} \text{Blue Box} & \text{Red Box} \\ \text{Green Box} & \text{Yellow Box} \end{bmatrix}$$

How to Multiply Matrices

Row Entries · Column Entries

$$\begin{bmatrix} 4 & -2 & -3 \\ -1 & 7 & 9 \end{bmatrix} \times \begin{bmatrix} -2 & 0 \\ 4 & -5 \end{bmatrix} =$$

Requirements to multiply matrices

