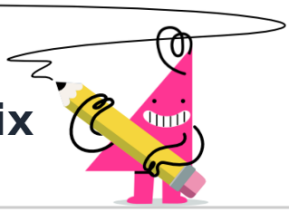
Name

Determine the dimensions of a matrix product



1 Is the matrix product AB defined?

A is a (3×2) matrix

$[6pt]B$ is a (3×3) matrix

A	B
No	Yes

2 Is the matrix product AB defined?

$$A = \begin{bmatrix} -2 & -1 \\ -3 & 1 \\ 8 & 9 \\ 4 & -4 \end{bmatrix}$$

$$[8pt]B = \begin{bmatrix} -5 & 9 & -6 \\ -4 & -9 & -7 \end{bmatrix}$$

A	B
Yes	No

3 What are the dimensions of the matrix product AB?

$$A = \begin{bmatrix} 1 & 0 & -3 \\ 6 & -7 & -4 \end{bmatrix}$$

$$[8pt]B = \begin{bmatrix} 7 & 8 \\ 5 & 4 \\ -8 & -7 \end{bmatrix}$$

A: (3×2)

B: (2×3)

C: $[\text{undefined}]$

D: (2×2)

4 What are the dimensions of the matrix product AB?

A is a (2×2) matrix

$[6pt]B$ is a (3×2) matrix

A: (3×2)

B: (2×2)

C: (2×3)

D: $[\text{undefined}]$

5 Find the matrix product AB.

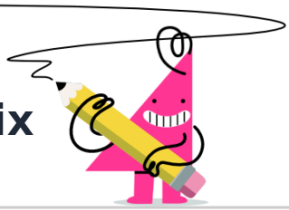
$$A = \begin{bmatrix} 3 & 6 \\ 0 & -2 \end{bmatrix}$$

$$[8pt]B = \begin{bmatrix} 1 & 0 \\ 3 & -1 \end{bmatrix}$$

$$[8pt]AB = [?]$$

A	B
$\begin{bmatrix} 13 & 8 \\ 2 & -3 \end{bmatrix}$	$\begin{bmatrix} 21 & -6 \\ -6 & 2 \end{bmatrix}$
C	D
$\begin{bmatrix} 21 & -6 \\ -7 & 2 \end{bmatrix}$	$\begin{bmatrix} -21 & 6 \\ 6 & -2 \end{bmatrix}$

Name



Determine the dimensions of a matrix product

6 What are the dimensions of the matrix product AB?

$$A = \begin{bmatrix} -5 & -1 \\ 9 & 1 \end{bmatrix}$$

$$[8pt] B = \begin{bmatrix} 3 & -4 & 5 \\ 2 & 8 & -6 \\ 6 & 4 & -7 \end{bmatrix}$$

A (2×3)

B (3×3)

C $[\text{undefined}]$

D (3×2)

7 What are the dimensions of the matrix product AB?

A is a (2×2) matrix

$[6pt] B$ is a (2×3) matrix

A $[\text{undefined}]$

B (2×2)

C (3×2)

D (2×3)

8 Find the matrix product AB.

$$A = \begin{bmatrix} -6 & -5 & -1 & 0 \\ -3 & 8 & -2 & 3 \end{bmatrix}$$

$$[8pt] B = \begin{bmatrix} -9 & -2 \\ -3 & 0 \\ 1 & -1 \end{bmatrix}$$

$$[8pt] AB = [\,?]$$

A $\begin{bmatrix} 8 & 6 \\ -7 & -3 \end{bmatrix}$

B $\begin{bmatrix} 2 & 5 & -4 \\ 3 & 7 & -6 \end{bmatrix}$

C $[\text{undefined}]$