

Pruebas multiplicación de matrices en secuencia

Prueba 1

$$(A_{2 \times 3})(B_{3 \times 4})(C_{4 \times 2})$$

	A	B	C
A	X	$A_{2 \times 3} B_{3 \times 4} \rightarrow 24$	$(AB)_{2 \times 4} C_{4 \times 2} \rightarrow 40$ $A_{2 \times 3} (BC)_{3 \times 2} \rightarrow 36$
B	X	X	$B_{3 \times 4} C_{4 \times 2} \rightarrow 24$
C	X	X	X

Prueba 2

$$(A_{30 \times 1})(B_{1 \times 40})(C_{40 \times 10})(D_{10 \times 25})$$

	A	B	C	D
A	X	$A_{30 \times 1} B_{1 \times 40} \rightarrow 1,200$	$(AB)_{30 \times 40} C_{40 \times 10} \rightarrow 13,200$ $A_{30 \times 1} (BC)_{1 \times 10} \rightarrow 700$	$(A(BC))_{30 \times 10} D_{10 \times 25} \rightarrow 8,200$ $A_{30 \times 1} ((BC)D)_{1 \times 25} \rightarrow 1,400$
B	X	X	$B_{1 \times 40} C_{40 \times 10} \rightarrow 400$	$(BC)_{1 \times 10} D_{10 \times 25} \rightarrow 650$ $B_{1 \times 40} (CD)_{40 \times 25} \rightarrow 11,000$
C	X	X	X	$C_{40 \times 10} D_{10 \times 25} \rightarrow 10,000$
D	X	X	X	X

Prueba 3

$$(A_{3 \times 2})(B_{2 \times 5})(C_{5 \times 1})(D_{1 \times 4})(E_{4 \times 7})$$

	A	B	C	D	E
A	X	$A_{3 \times 2} B_{2 \times 5} \rightarrow 30$	$(AB)_{3 \times 5} C_{5 \times 1} \rightarrow 45$ $A_{3 \times 2} (BC)_{2 \times 1} \rightarrow 16$	$(A(BC))_{3 \times 1} D_{1 \times 4} \rightarrow 28$ $A_{3 \times 2} ((BC)D)_{2 \times 4} \rightarrow 42$	$((A(BC))D)_{3 \times 4} E_{4 \times 7} \rightarrow 112$ $A_{3 \times 2} (((BC)D)E)_{2 \times 7} \rightarrow 116$
B	X	X	$B_{2 \times 5} C_{5 \times 1} \rightarrow 10$	$(BC)_{2 \times 1} D_{1 \times 4} \rightarrow 18$ $B_{2 \times 5} (CD)_{5 \times 4} \rightarrow 60$	$((BC)D)_{2 \times 4} E_{4 \times 7} \rightarrow 74$ $B_{2 \times 5} ((CD)E)_{5 \times 7} \rightarrow 133$
C	X	X	X	$C_{5 \times 1} D_{1 \times 4} \rightarrow 20$	$(CD)_{5 \times 4} E_{4 \times 7} \rightarrow 160$ $C_{5 \times 1} (DE)_{1 \times 7} \rightarrow 63$
D	X	X	X	X	$D_{1 \times 4} E_{4 \times 7} \rightarrow 28$
E	X	X	X	X	X