

LEY #	EXPRESIÓN 1		EXPRESIÓN 2		Ejemplos
	Trasformación	↔	Trasformación		
1	$(x^m)^n$	=	$x^{m \cdot n}$	$\frac{(x^m)^n}{x^{m \cdot n}}$	$(2^3)^4 = 2^{3 \cdot 4} = (2^{12}) = 4096$ $(2^{+3})^{+2} = 2^{+3 \cdot +2} = (2^6) = 64$ $(a^{-3})^{-4} = (a^{-3 \cdot -4}) = a^{12}$ $(2^b)^c = 2^{a \cdot b}$ $((a^3)^4)^2 = a^{24}$
1.a	$[(x^m)^n]^p$ De forma general	=	$x^{m \cdot n \cdot p}$	$\frac{[(x^m)^n]^p}{x^{m \cdot n \cdot p}}$ $(a^m)^n = a^{m \cdot n}$	<p>Ejemplo paso a paso</p> $(2^3)^2 = 2^{3 \cdot 2} = 2^6 = 64$
1.1	(x^{n^m})	=	$(x)^{n^m}$	<p>Nota: $(x^m)^n \neq (x^{n^m})$</p> $\frac{(x^m)^n \neq x^{n^m}}{\text{true}}$	$(2^{3^2}) = 2^{(3^2)} = 2^9 = 512$ $(a^{2^3}) = a^{(2^3)} = (a^8)$ $(4^{a^b}) = 4^{(a^b)}$

Function 06:30

$(2^3)^4 = 2^{3 \cdot 4} = 2^{12}$	$4096 = 4096 = 4096$
$(2^3)^2 = 2^{3 \cdot 2} = 2^6$	$64 = 64 = 64$
$(a^{-3})^{-4} = a^{-3 \cdot -4} = a^{12}$	$a^{12} = a^{12} = a^{12}$
$(2^b)^c = 2^{b \cdot c} = 2^{a \cdot b}$	$2^{b \cdot c} = 2^{a \cdot b}$
$((a^3)^4)^2 = a^{24}$	$a^{24} = a^{24}$

Sto ▶ simplify =

Function 07:39

$a^{2^3} = a^8$	$a^8 = a^8$
$2^{3^2} = 2^9$	$512 = 512$
$4^{a^b} = 4^{a^b}$	$4^{a^b} = 4^{a^b}$

Sto ▶ simplify =

2

$(x * y)^m$

=

$(x^m) * (y^m)$

$$(a \cdot b)^m = a^m \cdot b^m$$

CAS Function 09:15

expand((x+y) ^m)	(x+y) ^m
collect(x ^m *y ^m)	y ^m *x ^m
expand((x+y) ²)	x ² +y ²
collect(x ² *y ²)	y ² *x ²

Sto ▶ simplify =

$(5 * 2)^3 = (5^3 * 2^3) = (125 * 8) = 1000$

$(a * b)^2 = (a^2 * b^2)$

CAS Function 09:17

$(5*2)^3 = 5^3 * 2^3 = 125 * 8$	$1000 = 1000 = 1000$
$(a*b)^2 = a^2 * b^2$	$(a*b)^2 = a^2 * b^2$
expand(a*b) ² =a ² *b ²	(a*b) ² =a ² *b ²

Sto ▶ simplify =