



Exponents - Power Law - Exponent Base with Variable Power to Exponent Base

with Unknown Power

1 Solve for the missing exponent (?)

$$(10^2)^6 = (10^3)^?$$

A	B	C	D	E	F
? = 9	? = 6	? = 2	? = 5	? = 4	? = 3

2 Solve for the missing exponent (?)

$$(10^4)^9 = (10^3)^?$$

A	B	C	D	E	F
? = 20	? = 10	? = 17	? = 7	? = 4	? = 12

3 Solve for the missing exponent (?)

$$(10^3)^{12} = (10^4)^?$$

A	B	C	D	E	F
? = 16	? = 8	? = 4	? = 9	? = 1	? = 2

4 Solve for the missing exponent (?)

$$(10^4)^4 = (10^2)^?$$

A	B	C	D	E	F
? = 2	? = 13	? = 12	? = 8	? = 9	? = 11

5 Solve for the missing exponent (?)

$$(10^2)^8 = (10^4)^?$$

A	B	C	D	E	F
? = 4	? = 6	? = 1	? = 3	? = 9	? = 5

6 Solve for the missing exponent (?)

$$(10^2)^{12} = (10^4)^?$$

A	B	C	D	E	F
? = 6	? = 5	? = 1	? = 4	? = 14	? = 13

7 Solve for the missing exponent (?)

$$(10^3)^8 = (10^4)^?$$

A	B	C	D	E	F
? = 4	? = 11	? = 2	? = 6	? = 13	? = 1

8 Solve for the missing exponent (?)

$$(10^4)^6 = (10^3)^?$$

A	B	C	D	E	F
? = 9	? = 1	? = 8	? = 11	? = 2	? = 3