



Exponents - Power Law - Power of Ten Base with Variable Power to Unknown

Exponent Base with Known Power

1 Solve for the missing exponent (?)

$$10000^4 = (10^?)^8$$

A	B	C	D	E	F
? = 5	? = 8	? = 7	? = 11	? = 3	? = 2

2 Solve for the missing exponent (?)

$$1000^6 = (10^?)^9$$

A	B	C	D	E	F
? = 8	? = 5	? = 2	? = 7	? = 4	? = 6

3 Solve for the missing exponent (?)

$$10000^6 = (10^?)^8$$

A	B	C	D	E	F
? = 8	? = 4	? = 3	? = 7	? = 2	? = 10

4 Solve for the missing exponent (?)

$$100^9 = (10^?)^6$$

A	B	C	D	E	F
? = 5	? = 7	? = 9	? = 11	? = 3	? = 8

5 Solve for the missing exponent (?)

$$1000^{12} = (10^?)^9$$

A	B	C	D	E	F
? = 1	? = 3	? = 4	? = 11	? = 8	? = 2

6 Solve for the missing exponent (?)

$$100^8 = (10^?)^4$$

A	B	C	D	E	F
? = 5	? = 2	? = 6	? = 4	? = 1	? = 10

7 Solve for the missing exponent (?)

$$10000^6 = (10^?)^{12}$$

A	B	C	D	E	F
? = 9	? = 6	? = 3	? = 1	? = 5	? = 2

8 Solve for the missing exponent (?)

$$100^6 = (10^?)^4$$

A	B	C	D	E	F
? = 3	? = 10	? = 6	? = 8	? = 11	? = 2