



## Exponents - Power Law - Ten Base with Variable Power to Unknown Exponent

### Base with Known Power

**1** Solve for the missing exponent (?)

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

A	B	C	D	E	F
? = 2	? = 6	? = 3	? = 9	? = 5	? = 7

**2** Solve for the missing exponent (?)

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

A	B	C	D	E	F
? = 11	? = 6	? = 8	? = 5	? = 1	? = 2

**3** Solve for the missing exponent (?)

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

A	B	C	D	E	F
? = 4	? = 11	? = 10	? = 13	? = 2	? = 3

**4** Solve for the missing exponent (?)

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

A	B	C	D	E	F
? = 6	? = 2	? = 4	? = 10	? = 3	? = 7

**5** Solve for the missing exponent (?)

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

A	B	C	D	E	F
? = 6	? = 3	? = 11	? = 4	? = 5	? = 1

**6** Solve for the missing exponent (?)

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

A	B	C	D	E	F
? = 3	? = 5	? = 4	? = 1	? = 2	? = 6