Math worksheet on *'Exponents - Power Law - Power of Ten Base with Variable Power to Exponent Base with Unknown Power (Level 1)'*. Part of a broader unit on *'Exponents - Power Law - Practice'*

Learn online: app.mobius.academy/math/units/exponents_power_law_practice/

1 Solve for the missing exponent (?)

$$10000^{9} = (10^{3})^{?}$$

a	b	c	d	e	f
$? = 5$	$? = 12$	$? = 21$	$? = 9$	$? = 19$	$? = 14$

2 Solve for the missing exponent (?)

$$100^{9} = (10^{3})^{?}$$

a	b	c	d	e	f
$? = 2$	$? = 12$	$? = 3$	$? = 4$	$? = 6$	$? = 15$

3 Solve for the missing exponent (?)

$$1000^{6} = (10^{2})^{?}$$

a	b	c	d	e	f
$? = 4$	$? = 1$	$? = 9$	$? = 16$	$? = 13$	$? = 14$

4 Solve for the missing exponent (?)

$$1000^{12} = (10^{4})^{?}$$

a	b	c	d	e	f
$? = 1$	$? = 15$	$? = 7$	$? = 3$	$? = 9$	$? = 13$

5 Solve for the missing exponent (?)

$$100^{6} = (10^{3})^{?}$$

a	b	c	d	e	f
$? = 7$	$? = 5$	$? = 4$	$? = 12$	$? = 8$	$? = 6$

6 Solve for the missing exponent (?)

$$1000^{4} = (10^{2})^{?}$$

a	b	c	d	e	f
$? = 4$	$? = 11$	$? = 2$	$? = 12$	$? = 1$	$? = 6$

7 Solve for the missing exponent (?)

$$100^{12} = (10^{4})^{?}$$

a	b	c	d	e	f
$? = 1$	$? = 8$	$? = 6$	$? = 13$	$? = 10$	$? = 14$