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

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1

Solve for the missing exponent (?)

$$10000^{9} = (10^{?})^{12}$$

a	b	c	d	e	f
$? = 3$	$? = 8$	$? = 7$	$? = 4$	$? = 5$	$? = 6$

2

Solve for the missing exponent (?)

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

a	b	c	d	e	f
$? = 10$	$? = 2$	$? = 7$	$? = 4$	$? = 8$	$? = 3$

3

Solve for the missing exponent (?)

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

a	b	c	d	e	f
$? = 5$	$? = 2$	$? = 6$	$? = 1$	$? = 4$	$? = 10$

4

Solve for the missing exponent (?)

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

a	b	c	d	e	f
$? = 11$	$? = 3$	$? = 8$	$? = 9$	$? = 7$	$? = 5$

5

Solve for the missing exponent (?)

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

a	b	c	d	e	f
$? = 8$	$? = 7$	$? = 5$	$? = 6$	$? = 4$	$? = 2$

6

Solve for the missing exponent (?)

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

a	b	c	d	e	f
$? = 3$	$? = 2$	$? = 6$	$? = 5$	$? = 9$	$? = 1$

7

Solve for the missing exponent (?)

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

a	b	c	d	e	f
$? = 2$	$? = 11$	$? = 7$	$? = 3$	$? = 5$	$? = 8$