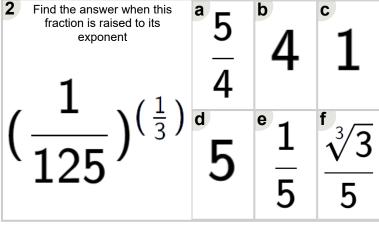# mobius

Math worksheet on *'Exponents - Fractional Exponent with Unit Fractional Base (Level 2)'*. Part of a broader unit on *'Exponents - Fractional Bases and Exponents Practice'*
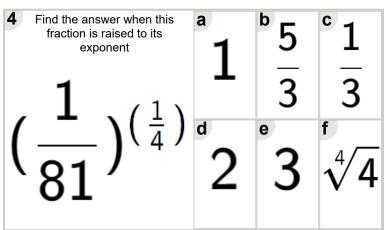
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1 Find the answer when this fraction is raised to its exponent

$$\left(\frac{1}{27}\right)^{\left(\frac{1}{3}\right)}$$

	a	b	c
	2	$\sqrt[3]{2}$	$\dfrac{4}{3}$
	d	**e**	**f**
	$\dfrac{1}{3}$	1	$\dfrac{3}{3}$

2 Find the answer when this fraction is raised to its exponent

$$\left(\frac{1}{125}\right)^{\left(\frac{1}{3}\right)}$$

a	b	c
$\dfrac{5}{4}$	4	1
d	**e**	**f**
5	$\dfrac{1}{5}$	$\dfrac{\sqrt[3]{3}}{5}$

3 Find the answer when this fraction is raised to its exponent

$$\left(\frac{1}{49}\right)^{\left(\frac{1}{2}\right)}$$

a	b	c
4	$\dfrac{1}{4}$	1
d	**e**	**f**
$\dfrac{1}{7}$	$\sqrt{4}$	$\sqrt{3}$

4 Find the answer when this fraction is raised to its exponent

$$\left(\frac{1}{81}\right)^{\left(\frac{1}{4}\right)}$$

a	b	c
1	$\dfrac{5}{3}$	$\dfrac{1}{3}$
d	**e**	**f**
2	3	$\sqrt[4]{4}$

5 Find the answer when this fraction is raised to its exponent

$$\left(\frac{1}{9}\right)^{\left(\frac{1}{2}\right)}$$

a	b	c
$\sqrt{4}$	$\dfrac{5}{4}$	1
d	**e**	**f**
$\dfrac{1}{3\sqrt{4}}$	$\dfrac{4}{3}$	$\dfrac{1}{3}$

6 Find the answer when this fraction is raised to its exponent

$$\left(\frac{1}{121}\right)^{\left(\frac{1}{2}\right)}$$

a	b	c
1	$\dfrac{1}{11}$	$\dfrac{2}{5}$
d	**e**	**f**
$\dfrac{\sqrt{3}}{11}$	$\dfrac{\sqrt{4}}{11}$	$\dfrac{1}{4}$

7 Find the answer when this fraction is raised to its exponent

$$\left(\frac{1}{8}\right)^{\left(\frac{1}{3}\right)}$$

a	b	c
5	$\dfrac{1}{5}$	$\dfrac{1}{2}$
d	**e**	**f**
$\dfrac{5}{5}$	$\dfrac{3}{5}$	1