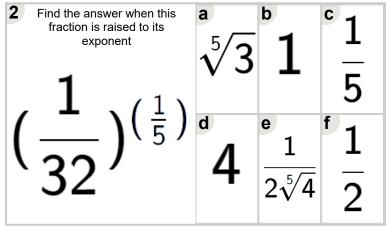# mobius

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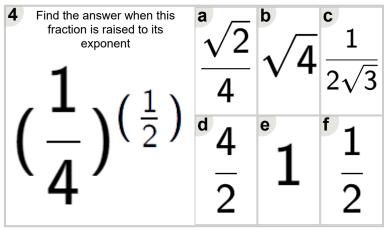
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1 Find the answer when this fraction is raised to its exponent

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

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

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

$$\left(\frac{1}{32}\right)^{\left(\frac{1}{5}\right)}$$

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

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

$$\left(\frac{1}{25}\right)^{\left(\frac{1}{2}\right)}$$

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

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

$$\left(\frac{1}{4}\right)^{\left(\frac{1}{2}\right)}$$

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

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

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

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

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

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

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

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

$$\left(\frac{1}{16}\right)^{\left(\frac{1}{4}\right)}$$

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

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