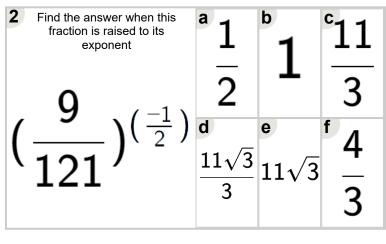# mobius

Math worksheet on *'Exponents - Negative Fractional Exponents with Fractional Base (Level 1)'*. Part of a broader unit on *'Exponents - Negative and Fractional Bases and Exponents'*
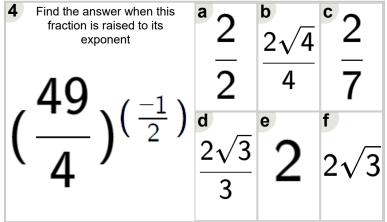
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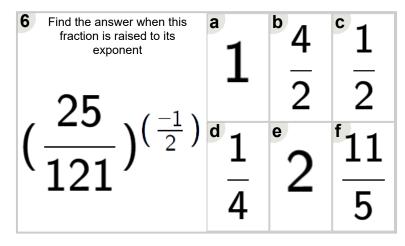app.mobius.academy/math/units/exponents_negative_and_fractional_bases_review/

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

$$\left(\frac{4}{9}\right)^{\left(\frac{-1}{2}\right)}$$

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

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

$$\left(\frac{9}{121}\right)^{\left(\frac{-1}{2}\right)}$$

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

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

$$\left(\frac{49}{25}\right)^{\left(\frac{-1}{2}\right)}$$

a	b	c
1	$\frac{5}{7}$	$\frac{1}{3}$
d	**e**	**f**
$\frac{1}{7\sqrt{3}}$	5	2

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

$$\left(\frac{49}{4}\right)^{\left(\frac{-1}{2}\right)}$$

a	b	c
$\frac{2}{2}$	$\frac{2\sqrt{4}}{4}$	$\frac{2}{7}$
d	**e**	**f**
$\frac{2\sqrt{3}}{3}$	2	$2\sqrt{3}$

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

$$\left(\frac{25}{4}\right)^{\left(\frac{-1}{2}\right)}$$

a	b	c
$\frac{1}{5}$	2	1
d	**e**	**f**
$2\sqrt{2}$	$\frac{2}{5}$	$\frac{1}{5\sqrt{2}}$

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

$$\left(\frac{25}{121}\right)^{\left(\frac{-1}{2}\right)}$$

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

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

$$\left(\frac{9}{25}\right)^{\left(\frac{-1}{2}\right)}$$

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

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