



Math worksheet on 'Exponents - Fractional Exponent with 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

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

a	b	c
1	5	3
d	e	f
$\frac{3}{2}$	$\frac{3}{11}$	$\frac{1}{11}$

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

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

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

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

$$\left(\frac{27}{8}\right)^{\left(\frac{1}{3}\right)}$$

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

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

$$\left(\frac{4}{121}\right)^{\left(\frac{1}{2}\right)}$$

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

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
$5\sqrt{3}$	$5\sqrt{4}$	1
d	e	f
5	$\frac{1}{5}$	$\frac{5}{2}$

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

$$\left(\frac{27}{125}\right)^{\left(\frac{1}{3}\right)}$$

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

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

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

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