



Math worksheet on 'Exponents - Fractional Exponent with Fractional Base (Level 1)'. 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

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

a	b	c
3	$\frac{2}{7}$	2
d	e	f
$\frac{4}{7\sqrt{4}}$	$\frac{1}{5}$	$\frac{2}{2}$

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

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

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

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

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

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

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

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

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

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

$$\left(\frac{49}{121}\right)^{\left(\frac{1}{2}\right)}$$

a	b	c
4	$\frac{5}{11}$	$\frac{2}{11\sqrt{2}}$
d	e	f
$\frac{7}{11}$	$\frac{7}{5}$	1