



Math worksheet on 'Exponents - Fractional Exponent with Non-Square Integer Base - Exponent to Unsimplified Radical (Level 2)'. Part of a broader unit on 'Exponents - Fractional Bases and Exponents - Practice'

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1 Find the radical that is the same as this number raised to its exponent

$$40^{\left(\frac{1}{3}\right)}$$

a	b	c
$2\sqrt[3]{40}$	$\sqrt[3]{40}$	$3\sqrt[3]{40}$
d	e	f
$\sqrt[3]{4}$	1	$5\sqrt[3]{40}$

2 Find the radical that is the same as this number raised to its exponent

$$72^{\left(\frac{1}{2}\right)}$$

a	b	c
$\sqrt{72}$	$3\sqrt{72}$	$5\sqrt{72}$
d	e	f
1	$2\sqrt{72}$	$4\sqrt{72}$

3 Find the radical that is the same as this number raised to its exponent

$$24^{\left(\frac{1}{3}\right)}$$

a	b	c
$\sqrt[3]{24}$	$3\sqrt[3]{24}$	$4\sqrt[3]{24}$
d	e	f
$2\sqrt[3]{24}$	$5\sqrt[3]{24}$	1

4 Find the radical that is the same as this number raised to its exponent

$$16^{\left(\frac{1}{2}\right)}$$

a	b	c
$\sqrt{16}$	$\frac{1}{\sqrt{16}}$	$\sqrt{16}^2$
d	e	f
$3\sqrt{16}$	1	$2\sqrt{16}$

5 Find the radical that is the same as this number raised to its exponent

$$80^{\left(\frac{1}{2}\right)}$$

a	b	c
$2\sqrt{80}$	1	$\sqrt{80}$
d	e	f
$\frac{1}{\sqrt{80}}$	$5\sqrt{80}$	$3\sqrt{80}$

6 Find the radical that is the same as this number raised to its exponent

$$48^{\left(\frac{1}{4}\right)}$$

a	b	c
$5\sqrt[4]{48}$	1	$4\sqrt[4]{48}$
d	e	f
$\sqrt[4]{48}$	$2\sqrt[4]{48}$	$\frac{1}{\sqrt[4]{48}}$

7 Find the radical that is the same as this number raised to its exponent

$$50^{\left(\frac{1}{2}\right)}$$

a	b	c
$\frac{1}{\sqrt{50}}$	$3\sqrt{50}$	$\sqrt{50}$
d	e	f
$\sqrt{50}^2$	1	$4\sqrt{50}$