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Math worksheet on *'Exponents - Fractional Exponents with Non-Square Integer Base - Exponent to Unsimplified Radical (Level 1)'*. Part of a broader unit on *'Exponents - Fractional Bases and Exponents - Intro'*

Learn online:

app.mobius.academy/math/units/exponents_fractional_bases_and_exponents_intro/

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

$75^{\left(\frac{1}{2}\right)}$

a	b	c
$2\sqrt{75}$	$\sqrt{75}$	$\frac{1}{\sqrt{75}}$
d	**e**	**f**
$\sqrt{75}^2$	$4\sqrt{75}$	1

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

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

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

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

$144^{\left(\frac{1}{2}\right)}$

a	b	c
1	$\sqrt{144}^2$	$4\sqrt{144}$
d	**e**	**f**
$5\sqrt{144}$	$\sqrt{144}$	$\frac{1}{\sqrt{144}}$

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

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

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

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

$32^{\left(\frac{1}{2}\right)}$

a	b	c
$5\sqrt{32}$	$2\sqrt{32}$	$\frac{1}{\sqrt{32}}$
d	**e**	**f**
$\sqrt{32}$	1	$4\sqrt{32}$

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

$45^{\left(\frac{1}{2}\right)}$

a	b	c
$4\sqrt{45}$	$3\sqrt{45}$	$5\sqrt{45}$
d	**e**	**f**
$\sqrt{45}$	$\frac{1}{\sqrt{45}}$	1

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

$100^{\left(\frac{1}{2}\right)}$

a	b	c
$5\sqrt{100}$	$\sqrt{100}^2$	1
d	**e**	**f**
$3\sqrt{100}$	$\frac{1}{\sqrt{100}}$	$\sqrt{100}$