



Math worksheet on 'Exponents - Fractional Exponents with Non-Square Integer Base - Factored Exponent to Answer (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 answer when this factored number is raised to its exponent

$$(2 \cdot 2 \cdot 2 \cdot 2 \cdot 5)^{\left(\frac{1}{2}\right)}$$

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

2 Find the answer when this factored number is raised to its exponent

$$(3 \cdot 3 \cdot 5)^{\left(\frac{1}{2}\right)}$$

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

3 Find the answer when this factored number is raised to its exponent

$$(2 \cdot 2 \cdot 2 \cdot 3 \cdot 3)^{\left(\frac{1}{2}\right)}$$

a	b	c	d	e	f
$3\sqrt{2}$	$6\sqrt{3}$	$6\sqrt{2}$	$\sqrt{2}$	6	$5\sqrt{2}$

4 Find the answer when this factored number is raised to its exponent

$$(2 \cdot 2 \cdot 5)^{\left(\frac{1}{2}\right)}$$

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

5 Find the answer when this factored number is raised to its exponent

$$(2 \cdot 2 \cdot 2 \cdot 2 \cdot 3 \cdot 3)^{\left(\frac{1}{2}\right)}$$

a	b	c	d	e	f
5	$12\sqrt{4}$	3	1	12	$12\sqrt{2}$

6 Find the answer when this factored number is raised to its exponent

$$(2 \cdot 2 \cdot 3 \cdot 3 \cdot 3)^{\left(\frac{1}{2}\right)}$$

a	b	c	d	e	f
$\sqrt{3}$	$5\sqrt{3}$	$2\sqrt{3}$	6	$3\sqrt{3}$	$6\sqrt{3}$

7 Find the answer when this factored number is raised to its exponent

$$(2 \cdot 2 \cdot 2 \cdot 2 \cdot 3)^{\left(\frac{1}{2}\right)}$$

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