



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

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

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

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

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

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

a	1	b	1	c	1	d	1	e	1	f	1
	$\frac{1}{3}$		$\frac{1}{10\sqrt{4}}$		$\frac{1}{1}$		$\frac{1}{2}$		$\frac{1}{10\sqrt{2}}$		$\frac{1}{10}$

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

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

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

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

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

a	1	b	1	c	1	d	1	e	1
	$\frac{1}{2}$		$\frac{1}{5\sqrt[3]{6}}$		$\frac{1}{4\sqrt[3]{6}}$		$\frac{1}{\sqrt[3]{6}}$		$\frac{1}{2\sqrt[3]{6}}$

5 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	1	b	1	c	1	d	1	e	1	f	1
	$\frac{1}{6}$		$\frac{1}{6\sqrt{2}}$		$\frac{1}{\sqrt{2}}$		$\frac{1}{6\sqrt{3}}$		$\frac{1}{2\sqrt{2}}$		$\frac{1}{4\sqrt{2}}$

6 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	1	b	1	c	1	d	1	e	1	f	1
	$\frac{1}{4}$		$\frac{1}{\sqrt{5}}$		$\frac{1}{4\sqrt{5}}$		$\frac{1}{3\sqrt{5}}$		$\frac{1}{4\sqrt{4}}$		$\frac{1}{2\sqrt{5}}$

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

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

a	1	b	1	c	1	d	1	e	1	f	1
	$\frac{1}{2\sqrt{6}}$		$\frac{1}{4\sqrt{6}}$		$\frac{1}{3\sqrt{6}}$		$\frac{1}{3}$		$\frac{1}{5\sqrt{6}}$		$\frac{1}{\sqrt{6}}$