



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

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

$$162^{(\frac{1}{3})}$$

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

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

$$20^{(\frac{1}{2})}$$

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

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

$$96^{(\frac{1}{2})}$$

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

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

$$36^{(\frac{1}{2})}$$

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

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

$$48^{(\frac{1}{2})}$$

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

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

$$32^{(\frac{1}{3})}$$

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

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

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

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