Math worksheet on *'Exponents - Fractional Exponents with Integer Base - Explanation to Answer (Level 2)'*. Part of a broader unit on *'Exponents - Fractional Bases and Exponents - Intro'*

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1 Given the hint, what is the fractional exponent the same as?

$16^{(\frac{1}{4})} \cdot 16^{(\frac{1}{4})} \cdot 16^{(\frac{1}{4})} \cdot 16^{(\frac{1}{4})} = 16$

$16^{(\frac{1}{4})} = ?$

a	b	c	d	e	f
1	2	$\frac{1}{\sqrt[4]{16}}$	3	$\sqrt[4]{16}$	16

2 Given the hint, what is the fractional exponent the same as?

$81^{(\frac{1}{4})} \cdot 81^{(\frac{1}{4})} \cdot 81^{(\frac{1}{4})} \cdot 81^{(\frac{1}{4})} = 81$

$81^{(\frac{1}{4})} = ?$

a	b	c	d	e	f
$\frac{1}{\sqrt[4]{81}}$	81	3	4	$\sqrt[4]{81}$	2

3 Given the hint, what is the fractional exponent the same as?

$64^{(\frac{1}{3})} \cdot 64^{(\frac{1}{3})} \cdot 64^{(\frac{1}{3})} = 64$

$64^{(\frac{1}{3})} = ?$

a	b	c	d	e	f
4	5	$\frac{1}{\sqrt[3]{64}}$	3	64	$\sqrt[3]{64}$

4 Given the hint, what is the fractional exponent the same as?

$216^{(\frac{1}{3})} \cdot 216^{(\frac{1}{3})} \cdot 216^{(\frac{1}{3})} = 216$

$216^{(\frac{1}{3})} = ?$

a	b	c	d	e	f
$\frac{1}{\sqrt[3]{216}}$	216	6	7	5	$\sqrt[3]{216}$

5 Given the hint, what is the fractional exponent the same as?

$27^{(\frac{1}{3})} \cdot 27^{(\frac{1}{3})} \cdot 27^{(\frac{1}{3})} = 27$

$27^{(\frac{1}{3})} = ?$

a	b	c	d	e	f
3	2	$\frac{1}{\sqrt[3]{27}}$	4	$\sqrt[3]{27}$	27

6 Given the hint, what is the fractional exponent the same as?

$32^{(\frac{1}{5})} \cdot 32^{(\frac{1}{5})} \cdot 32^{(\frac{1}{5})} \cdot 32^{(\frac{1}{5})} \cdot 32^{(\frac{1}{5})} = 32$

$32^{(\frac{1}{5})} = ?$

a	b	c	d	e	f
32	2	3	$\frac{1}{\sqrt[5]{32}}$	$\sqrt[5]{32}$	1

7 Given the hint, what is the fractional exponent the same as?

$9^{(\frac{1}{2})} \cdot 9^{(\frac{1}{2})} = 9$

$9^{(\frac{1}{2})} = ?$

a	b	c	d	e	f
$\sqrt[2]{9}$	2	$\frac{1}{\sqrt[2]{9}}$	3	4	9