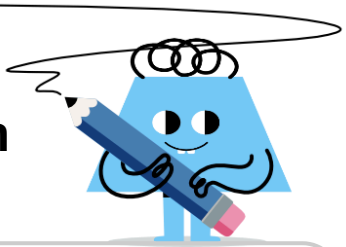
Name

Exponents - Fractional Exponents with Integer Base - Explanation to Answer



1 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	27	$\sqrt[4]{27}$	$\frac{1}{\sqrt[3]{27}}$	4

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	2	4	$\sqrt[5]{81}$	3

3 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
2	$\sqrt[5]{16}$	3	16	$\frac{1}{\sqrt[4]{16}}$	1

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

$$8^{(\frac{1}{3})} \cdot 8^{(\frac{1}{3})} \cdot 8^{(\frac{1}{3})} = 8$$

$$8^{(\frac{1}{3})} = ?$$

A	B	C	D	E	F
$\frac{1}{\sqrt[3]{8}}$	3	1	8	2	$\sqrt[4]{8}$

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

$$125^{(\frac{1}{3})} \cdot 125^{(\frac{1}{3})} \cdot 125^{(\frac{1}{3})} = 125$$

$$125^{(\frac{1}{3})} = ?$$

A	B	C	D	E	F
$\sqrt[4]{125}$	6	125	5	$\frac{1}{\sqrt[3]{125}}$	4

6 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
$\frac{1}{\sqrt{9}}$	2	3	4	9	$\sqrt[3]{9}$

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

$$4^{(\frac{1}{2})} \cdot 4^{(\frac{1}{2})} = 4$$

$$4^{(\frac{1}{2})} = ?$$

A	B	C	D	E	F
4	3	1	2	$\frac{1}{\sqrt{4}}$	$\sqrt[3]{4}$

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

$$25^{(\frac{1}{2})} \cdot 25^{(\frac{1}{2})} = 25$$

$$25^{(\frac{1}{2})} = ?$$

A	B	C	D	E	F
$\frac{1}{\sqrt{25}}$	4	6	$\sqrt[3]{25}$	5	25