



Exponents - Fractional Exponents with Non-Square Integer Base - Factored

Exponent to Answer

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

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

- | | | | | |
|----------------|---|----------------|---------------|----------------|
| A | B | C | D | E |
| $2\sqrt[3]{4}$ | 2 | $2\sqrt[3]{2}$ | $\sqrt[3]{4}$ | $3\sqrt[3]{4}$ |

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

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

- | | | | | | |
|----------------|----------------|---------------|----------------|---|----------------|
| A | B | C | D | E | F |
| $3\sqrt[3]{5}$ | $3\sqrt[3]{3}$ | $\sqrt[3]{5}$ | $2\sqrt[3]{5}$ | 3 | $3\sqrt[3]{2}$ |

3 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 |
| $4\sqrt{5}$ | $2\sqrt{5}$ | 4 | $5\sqrt{5}$ | $\sqrt{5}$ | $4\sqrt{2}$ |

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

$$(2 \cdot 3 \cdot 3 \cdot 3 \cdot 3)^{\left(\frac{1}{4}\right)}$$

- | | | | | | |
|----------------|----------------|---------------|----------------|----------------|---|
| A | B | C | D | E | F |
| $3\sqrt[4]{3}$ | $5\sqrt[4]{2}$ | $\sqrt[4]{2}$ | $4\sqrt[4]{2}$ | $3\sqrt[4]{2}$ | 3 |

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

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

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

6 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 | B | C | D | E | F |
| $5\sqrt{6}$ | $2\sqrt{6}$ | $\sqrt{6}$ | $3\sqrt{2}$ | $3\sqrt{6}$ | 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 |
| $5\sqrt{3}$ | $\sqrt{3}$ | $3\sqrt{3}$ | $4\sqrt{3}$ | $4\sqrt{4}$ | $4\sqrt{2}$ |

8 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 |
| $2\sqrt{3}$ | $3\sqrt{3}$ | 6 | $\sqrt{3}$ | $6\sqrt{3}$ | $5\sqrt{3}$ |