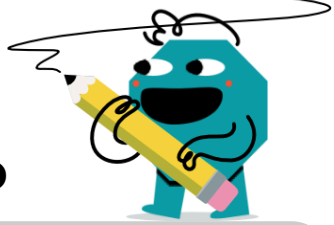
Name



Exponents - Fractional Exponents with Non-Square Integer Base - Exponent to Factored Radical

1 Factor this exponent's base number and express it as a radical

$12^{\left(\frac{1}{2}\right)}$

A $\sqrt{2 \cdot 2 \cdot 3 \cdot 7}$
B $\sqrt{2 \cdot 2 \cdot 3 \cdot 5}$
C $\sqrt{2 \cdot 2 \cdot 2 \cdot 3}$
D $\sqrt{2 \cdot 2 \cdot 3}$
E $\sqrt{2 \cdot 2 \cdot 3 \cdot 11}$
F $\sqrt{2 \cdot 2 \cdot 3 \cdot 3}$

2 Factor this exponent's base number and express it as a radical

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

A $\sqrt{3 \cdot 5 \cdot 5}$
B $\sqrt{3 \cdot 5 \cdot 5 \cdot 7}$
C $\sqrt{3 \cdot 5 \cdot 5 \cdot 13}$
D $\sqrt{3 \cdot 5 \cdot 5 \cdot 11}$
E $\sqrt{3 \cdot 3 \cdot 5 \cdot 5}$
F $\sqrt{2 \cdot 3 \cdot 5 \cdot 5}$

3 Factor this exponent's base number and express it as a radical

$16^{\left(\frac{1}{2}\right)}$

A $\sqrt{2 \cdot 2 \cdot 2 \cdot 2 \cdot 2}$
B $\sqrt{2 \cdot 2 \cdot 2}$
C $\sqrt{2 \cdot 2 \cdot 4}$
D $\sqrt{2 \cdot 4 \cdot 2}$
E $\sqrt{2 \cdot 2 \cdot 2 \cdot 2 \cdot 7}$
F $\sqrt{2 \cdot 2 \cdot 2 \cdot 2}$

4 Factor this exponent's base number and express it as a radical

$18^{\left(\frac{1}{2}\right)}$

A $\sqrt{2 \cdot 3 \cdot 3 \cdot 3}$
B $\sqrt{2 \cdot 3 \cdot 3 \cdot 5}$
C $\sqrt{2 \cdot 3 \cdot 3 \cdot 11}$
D $\sqrt{2 \cdot 3 \cdot 3 \cdot 7}$
E $\sqrt{2 \cdot 2 \cdot 3 \cdot 3}$
F $\sqrt{2 \cdot 3 \cdot 3}$

5 Factor this exponent's base number and express it as a radical

$48^{\left(\frac{1}{4}\right)}$

A $\sqrt[4]{2 \cdot 4 \cdot 2 \cdot 3}$
B $\sqrt[4]{2 \cdot 2 \cdot 2 \cdot 3}$
C $\sqrt[4]{2 \cdot 2 \cdot 4 \cdot 3}$
D $\sqrt[4]{2 \cdot 2 \cdot 2 \cdot 6}$
E $\sqrt[4]{2 \cdot 2 \cdot 2 \cdot 2 \cdot 3}$
F $\sqrt[4]{2 \cdot 2 \cdot 2 \cdot 2 \cdot 3 \cdot 13}$

6 Factor this exponent's base number and express it as a radical

$108^{\left(\frac{1}{3}\right)}$

A $\sqrt[3]{2 \cdot 2 \cdot 2 \cdot 3 \cdot 3 \cdot 3}$
B $\sqrt[3]{2 \cdot 2 \cdot 3 \cdot 3 \cdot 3 \cdot 5}$
C $\sqrt[3]{2 \cdot 2 \cdot 3 \cdot 3 \cdot 3}$
D $\sqrt[3]{2 \cdot 2 \cdot 3 \cdot 3}$
E $\sqrt[3]{2 \cdot 2 \cdot 9 \cdot 3}$
F $\sqrt[3]{2 \cdot 2 \cdot 3 \cdot 9}$

7 Factor this exponent's base number and express it as a radical

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

A $\sqrt{2 \cdot 2 \cdot 2 \cdot 5}$
B $\sqrt{2 \cdot 2 \cdot 3 \cdot 5}$
C $\sqrt{2 \cdot 2 \cdot 5}$
D $\sqrt{2 \cdot 2 \cdot 5 \cdot 13}$
E $\sqrt{2 \cdot 2 \cdot 5 \cdot 7}$
F $\sqrt{2 \cdot 2 \cdot 5 \cdot 11}$

8 Factor this exponent's base number and express it as a radical

$45^{\left(\frac{1}{2}\right)}$

A $\sqrt{3 \cdot 3 \cdot 5}$
B $\sqrt{3 \cdot 3 \cdot 5 \cdot 11}$
C $\sqrt{2 \cdot 3 \cdot 3 \cdot 5}$
D $\sqrt{3 \cdot 3 \cdot 5 \cdot 5}$
E $\sqrt{3 \cdot 3 \cdot 3 \cdot 5}$
F $\sqrt{3 \cdot 3 \cdot 5 \cdot 7}$