Name

# Exponents - Negative Fractional Exponents with Non-Square Integer Base - Exponent to Factored Exponent

**1** Factor the base number and simplify to make it easier to solve

$100^{\left(\frac{-1}{2}\right)}$

A $\frac{1}{(2\cdot 2\cdot 5\cdot 5)^{\left(\frac{1}{2}\right)}}$

B $\frac{1}{(2\cdot 2\cdot 25)^{\left(\frac{1}{2}\right)}}$

C $\frac{1}{(2\cdot 2\cdot 5\cdot 5\cdot 11)^{\left(\frac{1}{2}\right)}}$

D $\frac{1}{(2\cdot 2\cdot 2\cdot 5\cdot 5)^{\left(\frac{1}{2}\right)}}$

E $\frac{1}{(2\cdot 10\cdot 5)^{\left(\frac{1}{2}\right)}}$

F $\frac{1}{(2\cdot 2\cdot 5)^{\left(\frac{1}{2}\right)}}$

**2** Factor the base number and simplify to make it easier to solve

$80^{\left(\frac{-1}{2}\right)}$

A $\frac{1}{(2\cdot 2\cdot 2\cdot 5)^{\left(\frac{1}{2}\right)}}$

B $\frac{1}{(2\cdot 2\cdot 2\cdot 2\cdot 5\cdot 13)^{\left(\frac{1}{2}\right)}}$

C $\frac{1}{(2\cdot 2\cdot 4\cdot 5)^{\left(\frac{1}{2}\right)}}$

D $\frac{1}{(2\cdot 2\cdot 2\cdot 2\cdot 5)^{\left(\frac{1}{2}\right)}}$

E $\frac{1}{(2\cdot 4\cdot 2\cdot 5)^{\left(\frac{1}{2}\right)}}$

F $\frac{1}{(2\cdot 2\cdot 2\cdot 2\cdot 2\cdot 5)^{\left(\frac{1}{2}\right)}}$

**3** Factor the base number and simplify to make it easier to solve

$96^{\left(\frac{-1}{2}\right)}$

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

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

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

D $\frac{1}{(2\cdot 2\cdot 2\cdot 2\cdot 2\cdot 3\cdot 13)^{\left(\frac{1}{2}\right)}}$

E $\frac{1}{(2\cdot 2\cdot 2\cdot 2\cdot 2\cdot 3\cdot 5)^{\left(\frac{1}{2}\right)}}$

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

**4** Factor the base number and simplify to make it easier to solve

$72^{\left(\frac{-1}{2}\right)}$

A $\frac{1}{(2\cdot 2\cdot 2\cdot 3\cdot 3\cdot 11)^{\left(\frac{1}{2}\right)}}$

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

C $\frac{1}{(2\cdot 2\cdot 2\cdot 9)^{\left(\frac{1}{2}\right)}}$

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

E $\frac{1}{(2\cdot 2\cdot 2\cdot 3\cdot 3\cdot 7)^{\left(\frac{1}{2}\right)}}$

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

**5** Factor the base number and simplify to make it easier to solve

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

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

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

C $\frac{1}{(2\cdot 2\cdot 3\cdot 7)^{\left(\frac{1}{2}\right)}}$

D $\frac{1}{(2\cdot 2\cdot 3\cdot 5)^{\left(\frac{1}{2}\right)}}$

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

F $\frac{1}{(2\cdot 2\cdot 3\cdot 13)^{\left(\frac{1}{2}\right)}}$

**6** Factor the base number and simplify to make it easier to solve

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

A $\frac{1}{(2\cdot 2\cdot 3\cdot 5)^{\left(\frac{1}{2}\right)}}$

B $\frac{1}{(2\cdot 2\cdot 5\cdot 7)^{\left(\frac{1}{2}\right)}}$

C $\frac{1}{(2\cdot 2\cdot 5)^{\left(\frac{1}{2}\right)}}$

D $\frac{1}{(2\cdot 2\cdot 5\cdot 11)^{\left(\frac{1}{2}\right)}}$

E $\frac{1}{(2\cdot 2\cdot 5\cdot 13)^{\left(\frac{1}{2}\right)}}$

F $\frac{1}{(2\cdot 2\cdot 5\cdot 5)^{\left(\frac{1}{2}\right)}}$

**7** Factor the base number and simplify to make it easier to solve

$50^{\left(\frac{-1}{2}\right)}$

A $\frac{1}{(2\cdot 5\cdot 5\cdot 13)^{\left(\frac{1}{2}\right)}}$

B $\frac{1}{(2\cdot 5\cdot 5)^{\left(\frac{1}{2}\right)}}$

C $\frac{1}{(2\cdot 2\cdot 5\cdot 5)^{\left(\frac{1}{2}\right)}}$

D $\frac{1}{(2\cdot 3\cdot 5\cdot 5)^{\left(\frac{1}{2}\right)}}$

E $\frac{1}{(2\cdot 5\cdot 5\cdot 7)^{\left(\frac{1}{2}\right)}}$

F $\frac{1}{(2\cdot 5\cdot 5\cdot 5)^{\left(\frac{1}{2}\right)}}$

**8** Factor the base number and simplify to make it easier to solve

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

A $\frac{1}{(3\cdot 3\cdot 5)^{\left(\frac{1}{2}\right)}}$

B $\frac{1}{(3\cdot 3\cdot 5\cdot 11)^{\left(\frac{1}{2}\right)}}$

C $\frac{1}{(3\cdot 3\cdot 5\cdot 5)^{\left(\frac{1}{2}\right)}}$

D $\frac{1}{(3\cdot 3\cdot 5\cdot 7)^{\left(\frac{1}{2}\right)}}$

E $\frac{1}{(2\cdot 3\cdot 3\cdot 5)^{\left(\frac{1}{2}\right)}}$

F $\frac{1}{(3\cdot 3\cdot 3\cdot 5)^{\left(\frac{1}{2}\right)}}$