



## Exponents - Negative Fractional Exponents with Square Integer Base - Exponent to Radical

1 Find the radical that is the same as this number raised to its exponent

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

A  $\frac{1}{\sqrt{9}}$  B  $\frac{1}{\sqrt{1}}$  C  $\frac{1}{5\sqrt{9}}$

$$\sqrt{9}$$

D  $\frac{1}{4\sqrt{9}}$  E  $\frac{1}{3\sqrt{9}}$  F  $\frac{1}{\sqrt{9}^2}$

$$4\sqrt{9}$$

$$3\sqrt{9}$$

$$\sqrt{9}^2$$

2 Find the radical that is the same as this number raised to its exponent

$$81^{\left(\frac{-1}{4}\right)}$$

A  $\sqrt[4]{81}$

B  $\frac{1}{2\sqrt[4]{81}}$

C  $\frac{1}{\sqrt{1}}$

$$\sqrt[4]{81}$$

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

$$\sqrt{1}$$

D  $\frac{1}{\sqrt[4]{81}}$

E  $\sqrt[4]{81}^4$

F  $\frac{1}{\sqrt[4]{81}^2}$

$$\sqrt[4]{81}$$

$$\sqrt[4]{81}^4$$

$$\sqrt[4]{81}^2$$

3 Find the radical that is the same as this number raised to its exponent

$$32^{\left(\frac{-1}{5}\right)}$$

A  $\frac{1}{\sqrt[5]{4}}$

B  $\frac{1}{\sqrt[5]{32}^2}$

C  $\frac{1}{2\sqrt[5]{32}}$

$$\sqrt[5]{4}$$

$$\sqrt[5]{32}^2$$

$$2\sqrt[5]{32}$$

D  $\frac{1}{\sqrt{1}}$

E  $\frac{1}{\sqrt[5]{32}}$

F  $\sqrt[5]{32}$

$$\sqrt{1}$$

$$\sqrt[5]{32}$$

$$\sqrt[5]{32}$$

4 Find the radical that is the same as this number raised to its exponent

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

A  $\frac{1}{\sqrt{1}}$

B  $\sqrt{16}$

C  $\frac{1}{\sqrt{16}}$

$$\sqrt{1}$$

$$\sqrt{16}$$

$$\frac{1}{\sqrt{16}}$$

D  $\frac{1}{5\sqrt{16}}$

E  $\frac{1}{\sqrt{16}^2}$

F  $\frac{1}{3\sqrt{16}}$

$$5\sqrt{16}$$

$$\sqrt{16}^2$$

$$3\sqrt{16}$$

5 Find the radical that is the same as this number raised to its exponent

$$16^{\left(\frac{-1}{4}\right)}$$

A  $\frac{1}{4\sqrt[4]{16}}$

B  $\frac{1}{\sqrt[4]{2}}$

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

$$4\sqrt[4]{16}$$

$$\sqrt[4]{2}$$

$$2\sqrt[4]{16}$$

D  $\frac{1}{\sqrt{1}}$

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

F  $\frac{1}{\sqrt[4]{16}}$

$$\sqrt{1}$$

$$3\sqrt[4]{16}$$

$$\sqrt[4]{16}$$

6 Find the radical that is the same as this number raised to its exponent

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

A  $\frac{1}{4\sqrt{4}}$

B  $\frac{1}{\sqrt{4}^2}$

C  $\frac{1}{2\sqrt{4}}$

$$4\sqrt{4}$$

$$\sqrt{4}^2$$

$$2\sqrt{4}$$

D  $\frac{1}{\sqrt{1}}$

E  $\sqrt{4}$

F  $\frac{1}{\sqrt{4}}$

$$\sqrt{1}$$

$$\sqrt{4}$$

$$\frac{1}{\sqrt{4}}$$

7 Find the radical that is the same as this number raised to its exponent

$$27^{\left(\frac{-1}{3}\right)}$$

A  $\frac{1}{5\sqrt[3]{27}}$

B  $\frac{1}{\sqrt[3]{3}}$

C  $\frac{1}{\sqrt{1}}$

$$5\sqrt[3]{27}$$

$$\sqrt[3]{3}$$

$$\sqrt{1}$$

D  $\frac{1}{\sqrt[3]{2}}$

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

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

$$\sqrt[3]{2}$$

$$\sqrt[3]{27}$$

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

8 Find the radical that is the same as this number raised to its exponent

$$125^{\left(\frac{-1}{3}\right)}$$

A  $\frac{1}{\sqrt[3]{125}^2}$

B  $\frac{1}{4\sqrt[3]{125}}$

C  $\sqrt[3]{125}$

$$\sqrt[3]{125}^2$$

$$4\sqrt[3]{125}$$

$$\sqrt[3]{125}$$

D  $\frac{1}{\sqrt{1}}$

E  $\sqrt[3]{125}^3$

F  $\frac{1}{\sqrt[3]{125}}$

$$\sqrt{1}$$

$$\sqrt[3]{125}^3$$

$$\frac{1}{\sqrt[3]{125}}$$