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Math worksheet on *'Exponents - Negative Fractional Exponents with Non-Square Integer Base - Exponent to Unsimplified Radical (Level 2)'*. Part of a broader unit on *'Exponents - Negative and Fractional Bases and Exponents'*

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

$144^{\left(\frac{-1}{2}\right)}$

a. $\frac{1}{\sqrt{144}^2}$ b. $\frac{1}{4\sqrt{144}}$ c. $\sqrt{144}$

d. $\frac{1}{1}$ e. $\frac{1}{5\sqrt{144}}$ f. $\frac{1}{\sqrt{144}}$

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

$24^{\left(\frac{-1}{2}\right)}$

a. $\frac{1}{5\sqrt{24}}$ b. $\frac{1}{\sqrt{24}^2}$ c. $\frac{1}{\sqrt{24}}$

d. $\sqrt{24}$ e. $\frac{1}{4\sqrt{24}}$ f. $\frac{1}{1}$

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

$180^{\left(\frac{-1}{2}\right)}$

a. $\frac{1}{2\sqrt{180}}$ b. $\frac{1}{3\sqrt{180}}$ c. $\frac{1}{\sqrt{180}^2}$

d. $\frac{1}{1}$ e. $\sqrt{180}$ f. $\frac{1}{\sqrt{180}}$

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

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

a. $\frac{1}{\sqrt{72}^2}$ b. $\frac{1}{4\sqrt{72}}$ c. $\frac{1}{1}$

d. $\frac{1}{5\sqrt{72}}$ e. $\sqrt{72}$ f. $\frac{1}{\sqrt{72}}$

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

$108^{\left(\frac{-1}{2}\right)}$

a. $\frac{1}{5\sqrt{108}}$ b. $\frac{1}{\sqrt{108}}$ c. $\frac{1}{2\sqrt{108}}$

d. $\frac{1}{3\sqrt{108}}$ e. $\frac{1}{1}$ f. $\frac{1}{\sqrt{108}^2}$

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

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

a. $\frac{1}{1}$ b. $\frac{1}{2\sqrt{75}}$ c. $\sqrt{75}$

d. $\frac{1}{\sqrt{75}^2}$ e. $\sqrt{75}^2$ f. $\frac{1}{\sqrt{75}}$

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

$135^{\left(\frac{-1}{3}\right)}$

a. $\frac{1}{3\sqrt[3]{135}}$ b. $\frac{1}{\sqrt[3]{135}}$ c. $\frac{1}{2\sqrt[3]{135}}$

d. $\frac{1}{1}$ e. $\frac{1}{\sqrt[3]{135}^2}$ f. $\frac{1}{4\sqrt[3]{135}}$