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

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

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

a $\frac{1}{4\sqrt[3]{135}}$ **b** $\frac{1}{\sqrt[3]{135}}$ **c** $\frac{1}{1}$

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

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

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

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

d $\sqrt{180}$ **e** $\frac{1}{\sqrt{180}}$ **f** $\frac{1}{\sqrt{180}^2}$

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

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

a $\frac{1}{\sqrt{3}}$ **b** $\frac{1}{1}$ **c** $\frac{1}{\sqrt{20}}$

d $\frac{1}{4\sqrt{20}}$ **e** $\frac{1}{2\sqrt{20}}$ **f** $\frac{1}{\sqrt{20}^2}$

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

$40^{\left(\frac{-1}{3}\right)}$

a $\frac{1}{5\sqrt[3]{40}}$ **b** $\frac{1}{\sqrt[3]{2}}$ **c** $\frac{1}{\sqrt[3]{3}}$

d $\frac{1}{1}$ **e** $\frac{1}{\sqrt[3]{40}^2}$ **f** $\frac{1}{\sqrt[3]{40}}$

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

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

a $\frac{1}{\sqrt{108}^2}$ **b** $\frac{1}{3\sqrt{108}}$ **c** $\frac{1}{2\sqrt{108}}$

d $\frac{1}{1}$ **e** $\frac{1}{\sqrt{108}}$ **f** $\frac{1}{5\sqrt{108}}$

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

$128^{\left(\frac{-1}{3}\right)}$

a $\frac{1}{5\sqrt[3]{128}}$ **b** $\frac{1}{\sqrt[3]{128}}$ **c** $\frac{1}{1}$

d $\frac{1}{\sqrt[3]{128}^2}$ **e** $\frac{1}{4\sqrt[3]{128}}$ **f** $\sqrt[3]{128}$

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

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

a $\frac{1}{3\sqrt{12}}$ **b** $\frac{1}{\sqrt{12}}$ **c** $\frac{1}{1}$

d $\frac{1}{4\sqrt{12}}$ **e** $\sqrt{12}$ **f** $\frac{1}{\sqrt{12}^2}$