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

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1 Find the answer when this number is raised to its exponent

$32^{\left(\frac{-1}{2}\right)}$

a $\frac{1}{4\sqrt{2}}$ **b** $\frac{1}{2\sqrt{2}}$ **c** $\frac{1}{4}$

d $\frac{1}{\sqrt{2}}$ **e** $\frac{1}{3\sqrt{2}}$ **f** $\frac{1}{5\sqrt{2}}$

2 Find the answer when this number is raised to its exponent

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

a $\frac{1}{5\sqrt[3]{2}}$ **b** $\frac{1}{4}$ **c** $\frac{1}{4\sqrt[3]{2}}$

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

3 Find the answer when this number is raised to its exponent

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

a $\frac{1}{4}$ **b** $\frac{1}{4\sqrt{3}}$ **c** $\frac{1}{4\sqrt{2}}$

d $\frac{1}{3}$ **e** $\frac{1}{2}$ **f** $\frac{1}{1}$

4 Find the answer when this number is raised to its exponent

$150^{\left(\frac{-1}{2}\right)}$

a $\frac{1}{2\sqrt{6}}$ **b** $\frac{1}{3\sqrt{6}}$ **c** $\frac{1}{5}$

d $\frac{1}{\sqrt{6}}$ **e** $\frac{1}{5\sqrt{6}}$ **f** $\frac{1}{4\sqrt{6}}$

5 Find the answer when this number is raised to its exponent

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

a $\frac{1}{2\sqrt{5}}$ **b** $\frac{1}{4\sqrt{4}}$ **c** $\frac{1}{3\sqrt{5}}$

d $\frac{1}{4}$ **e** $\frac{1}{4\sqrt{5}}$ **f** $\frac{1}{\sqrt{5}}$

6 Find the answer when this number is raised to its exponent

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

a $\frac{1}{4\sqrt[3]{5}}$ **b** $\frac{1}{3\sqrt[3]{5}}$ **c** $\frac{1}{3\sqrt[3]{4}}$

d $\frac{1}{3}$ **e** $\frac{1}{\sqrt[3]{5}}$

7 Find the answer when this number is raised to its exponent

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

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

d $\frac{1}{2\sqrt{4}}$ **e** $\frac{1}{4\sqrt{5}}$ **f** $\frac{1}{2\sqrt{5}}$