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Math worksheet on *'Exponents - Negative Fractiona Exponents with Non-Square Integer Base - Exponen to Unsimplified Radical (Level 1)'*. 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

$18^{\left(\frac{-1}{2}\right)}$

a $\frac{1}{1}$ **b** $\frac{1}{\sqrt{18}}$ **c** $\frac{1}{4\sqrt{18}}$

d $\frac{1}{3\sqrt{18}}$ **e** $\sqrt{18}$ **f** $\frac{1}{\sqrt{18^2}}$

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

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

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

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

a $\frac{1}{1}$ **b** $\frac{1}{4\sqrt{72}}$ **c** $\frac{1}{5\sqrt{72}}$

d $\sqrt{72}$ **e** $\frac{1}{\sqrt{72^2}}$ **f** $\frac{1}{\sqrt{72}}$

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

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

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

d $\frac{1}{\sqrt{144}}$ **e** $\frac{1}{4\sqrt{144}}$ **f** $\frac{1}{5\sqrt{144}}$

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

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

a $\frac{1}{\sqrt{50^2}}$ **b** $\sqrt{50}$ **c** $\frac{1}{5\sqrt{50}}$

d $\frac{1}{4\sqrt{50}}$ **e** $\frac{1}{\sqrt{50}}$ **f** $\frac{1}{1}$

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

$36^{\left(\frac{-1}{2}\right)}$

a $\frac{1}{2\sqrt{36}}$ **b** $\frac{1}{4\sqrt{36}}$ **c** $\frac{1}{\sqrt{36^2}}$

d $\frac{1}{\sqrt{36}}$ **e** $\sqrt{36}$ **f** $\frac{1}{1}$

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

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

a $\frac{1}{\sqrt{12}}$ **b** $\frac{1}{\sqrt{12^2}}$ **c** $\sqrt{12}$

d $\frac{1}{3\sqrt{12}}$ **e** $\frac{1}{4\sqrt{12}}$ **f** $\frac{1}{1}$