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

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

$8^{\left(\frac{1}{3}\right)}$

a $4\sqrt[3]{8}$ **b** $3\sqrt[3]{8}$ **c** $\sqrt[3]{8}$

d $\sqrt[3]{4}$ **e** $2\sqrt[3]{8}$ **f** 1

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

$25^{\left(\frac{1}{2}\right)}$

a 1 **b** $\sqrt{25}$ **c** $\sqrt{2}$

d $3\sqrt{25}$ **e** $\frac{1}{\sqrt{25}}$ **f** $\sqrt{25}^{2}$

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

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

a $3\sqrt{16}$ **b** $\sqrt{16}$ **c** 1

d $\sqrt{2}$ **e** $2\sqrt{16}$ **f** $4\sqrt{16}$

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

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

a $3\sqrt{9}$ **b** $2\sqrt{9}$ **c** $\sqrt{4}$

d $4\sqrt{9}$ **e** 1 **f** $\sqrt{9}$

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

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

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

d $\sqrt{3}$ **e** $4\sqrt{4}$ **f** $\sqrt{4}$

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

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

a $3\sqrt{36}$ **b** $2\sqrt{36}$ **c** $\sqrt{36}$

d $5\sqrt{36}$ **e** $4\sqrt{36}$ **f** 1

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

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

a $2\sqrt[4]{81}$ **b** $\frac{1}{\sqrt[4]{81}}$ **c** $\sqrt[4]{81}^{4}$

d 1 **e** $\sqrt[4]{81}$