



Math worksheet on 'Exponents - Negative Fractional Exponents with Integer Base - Explanation to Answer (Level 1)'. Part of a broader unit on 'Exponents - Fractional Bases and Exponents - Practice'

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1 Given the hint, what is the fractional exponent the same as?

$$4^{(-\frac{1}{2})} \cdot 4^{(-\frac{1}{2})} = \frac{1}{4}$$

$$4^{(-\frac{1}{2})} = ?$$

a $\frac{1}{1}$	b $\frac{1}{2}$	c $\sqrt[3]{4}$
d $\frac{1}{2^2}$	e $\frac{1}{3}$	f $\frac{1}{4^2}$

2 Given the hint, what is the fractional exponent the same as?

$$36^{(-\frac{1}{2})} \cdot 36^{(-\frac{1}{2})} = \frac{1}{36}$$

$$36^{(-\frac{1}{2})} = ?$$

a $\frac{1}{6}$	b $\frac{1}{7}$	c $\sqrt[3]{36}$	d $\frac{1}{5}$	e $\frac{1}{36^2}$	f $\frac{1}{6^2}$
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3 Given the hint, what is the fractional exponent the same as?

$$9^{(-\frac{1}{2})} \cdot 9^{(-\frac{1}{2})} = \frac{1}{9}$$

$$9^{(-\frac{1}{2})} = ?$$

a $\sqrt[3]{9}$	b $\frac{1}{3^2}$	c $\frac{1}{4}$
d $\frac{1}{3}$	e $\frac{1}{2}$	f $\frac{1}{9^2}$

4 Given the hint, what is the fractional exponent the same as?

$$25^{(-\frac{1}{2})} \cdot 25^{(-\frac{1}{2})} = \frac{1}{25}$$

$$25^{(-\frac{1}{2})} = ?$$

a $\frac{1}{5^2}$	b $\frac{1}{6}$	c $\frac{1}{5}$	d $\sqrt[3]{25}$	e $\frac{1}{25^2}$	f $\frac{1}{4}$
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5 Given the hint, what is the fractional exponent the same as?

$$16^{(-\frac{1}{2})} \cdot 16^{(-\frac{1}{2})} = \frac{1}{16}$$

$$16^{(-\frac{1}{2})} = ?$$

a $\frac{1}{16^2}$	b $\frac{1}{3}$	c $\sqrt[3]{16}$	d $\frac{1}{4}$	e $\frac{1}{4^2}$	f $\frac{1}{5}$
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