



Math worksheet on 'Exponents - Unit Fraction Base (Expanded) (Level 3)'. Part of a broader unit on 'Exponents - Fractional Bases and Exponents - Intro'

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1 Find the answer when this fraction is multiplied as shown

$$\left(\frac{1}{6}\right) \cdot \left(\frac{1}{6}\right) \cdot \left(\frac{1}{6}\right)$$

a	$\frac{1}{36}$	b	$\frac{2}{6}$	c	$\frac{4}{6}$	d	$\frac{1}{213}$	e	$\frac{1}{216}$	f	$\frac{4}{1,296}$
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2 Find the answer when this fraction is multiplied as shown

$$\left(\frac{1}{2}\right) \cdot \left(\frac{1}{2}\right) \cdot \left(\frac{1}{2}\right) \cdot \left(\frac{1}{2}\right) \cdot \left(\frac{1}{2}\right)$$

a	$\frac{1}{64}$	b	$\frac{2}{7}$	c	$\frac{6}{10}$	d	$\frac{1}{7}$	e	$\frac{1}{16}$	f	$\frac{1}{32}$
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3 Find the answer when this fraction is multiplied as shown

$$\left(\frac{1}{9}\right) \cdot \left(\frac{1}{9}\right)$$

a	$\frac{2}{6,561}$	b	$\frac{1}{9}$	c	$\frac{1}{11}$
d	$\frac{2}{78}$	e	$\frac{1}{81}$	f	$\frac{1}{729}$

4 Find the answer when this fraction is multiplied as shown

$$\left(\frac{1}{5}\right) \cdot \left(\frac{1}{5}\right) \cdot \left(\frac{1}{5}\right)$$

a	$\frac{1}{125}$	b	$\frac{4}{15}$	c	$\frac{1}{625}$	d	$\frac{1}{5}$	e	$\frac{1}{25}$	f	$\frac{1}{122}$
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5 Find the answer when this fraction is multiplied as shown

$$\left(\frac{1}{11}\right) \cdot \left(\frac{1}{11}\right)$$

a	$\frac{1}{14,641}$	b	$\frac{1}{124}$	c	$\frac{2}{1,331}$
d	1	e	$\frac{1}{121}$	f	$\frac{2}{11}$

6 Find the answer when this fraction is multiplied as shown

$$\left(\frac{1}{10}\right) \cdot \left(\frac{1}{10}\right)$$

a	$\frac{2}{1,000}$	b	$\frac{1}{20}$	c	$\frac{1}{100}$
d	$\frac{2}{20}$	e	$\frac{2}{10,000}$	f	$\frac{3}{1,000}$

7 Find the answer when this fraction is multiplied as shown

$$\left(\frac{1}{3}\right) \cdot \left(\frac{1}{3}\right) \cdot \left(\frac{1}{3}\right) \cdot \left(\frac{1}{3}\right)$$

a	$\frac{1}{12}$	b	$\frac{4}{27}$	c	$\frac{1}{7}$	d	$\frac{1}{81}$	e	$\frac{1}{27}$	f	$\frac{4}{243}$
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