Name:		



Math worksheet on 'Prime Factorization as Exponents - 4 Factors (Level 3)'. Part of a broader unit on 'Factoring and Primes - Advanced'

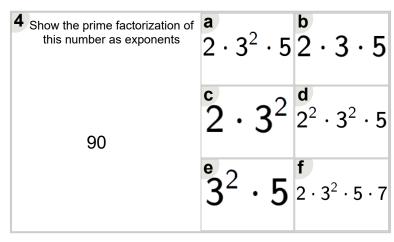
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1 Show the prime factorization of this number as exponents		b 2 ³ · 3 · 7	2^3
56	d	е	f
	$2^3 \cdot 7$	$2^2 \cdot 14$	$2^4 \cdot 7$

Show the prime factorization of this number as exponents
$$2^2 \cdot 3^2 \cdot 11 \quad 2^2 \cdot 3^2 \cdot 5$$

$$2^2 \cdot 3^2 \cdot 3^2$$

3 Show the prime factorization of this number as exponents	$\overset{\mathtt{a}}{2}^2 \cdot 5^2$	$\overset{\mathtt{b}}{2} \cdot \mathtt{5}^2$
100	c 2 · 10 · 5	$\overset{\scriptscriptstyle{d}}{2}^2 \cdot 25$
	$2^2 \cdot 5^3$	$ \begin{array}{c} \mathbf{f} \\ 2^2 \cdot 5^2 \cdot 13 \end{array} $



5 Show the prime factorization of this number as exponents	a 2 · 3 · 21	$\begin{array}{c} \mathbf{b} \\ 2 \cdot 3^2 \cdot 5 \cdot 7 \end{array}$
126	$\begin{array}{c} \mathbf{c} \\ 2 \cdot 3^2 \cdot 7 \cdot 11 \end{array}$	$\overset{\scriptscriptstyle{d}}{2}\cdot 3^2$
	$2^2 \cdot 3^2 \cdot 7$	$\begin{matrix} \mathbf{f} \\ 2 \cdot 3^2 \cdot 7 \end{matrix}$

Show the prime factorization of this number as exponents
$$2^2 \cdot 22 \stackrel{\text{b}}{2}^3 \cdot 11^2$$

$$2^3 \cdot 11 \stackrel{\text{d}}{2}^4 \cdot 11$$

$$2^3 \cdot 7 \cdot 11 \stackrel{\text{f}}{2}^2 \cdot 11$$

7 Show the prime factorization of this number as exponents	2 ²	· 10	2 ³	. 5
40	^c 2 ⁴	. 5	2 ³	· 5 ²
	e 2 ³ · !	5 · 11	f 2 ³ ·	5 · 7