Name:		



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

Learn online: app.mobius.academy/math/units/factoring and primes intro/

1 Show the prime factorization of this number as exponents	2^4	^b 2 ⁵	c 2 ⁴ · 11
16	^d 2 ³		

Show the prime factorization of this number as exponents	^a 2 ⁴ · 11	b 2 · 4 · 11
88	^c 2 ³	^d 2 ³ · 11

3 Show the prime factorization of this number as exponents	a 2 ·	3	· 21	b 2 ·	3 ² ·	5 ·	7
126	^c 2	•	3 ²	d 2 ·	3 ²	•	7

Show the prime factorization of this number as exponents	a 3 ⁴ · 5	^b 3 ⁴	3 ³
81	d	е	
	$3^4 \cdot 13$	$2 \cdot 3^4$	

5 Show the prime factorization of this number as exponents	${\overset{\mathbf{a}}{2}}^2 \cdot {5}^2 \overset{\mathbf{b}}{2}^2 \cdot 3 \cdot {5}^2$
100	$\begin{array}{c} \mathbf{c} \\ 2^2 \cdot 5^2 \cdot 7 \end{array} \begin{array}{c} \mathbf{d} \\ 2^2 \cdot 25 \end{array}$
	$\begin{array}{c} \mathbf{e} \\ 2^2 \cdot 5^2 \cdot 11 \end{array}$

6 Show the prime factorization of this number as exponents		$egin{array}{c} \mathbf{b} \ 2^2 \cdot 7 \end{array}$	c 2 ³ · 7
56	d $2^4 \cdot 7$		

7 Show the prime factorization of this number as exponents	а	b	С
	$2^2 \cdot 3^3$	2 · 3 · 9	$2 \cdot 3^2$
54	d		
	$2 \cdot 3^3$		