



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

Learn online: [app.mobius.academy/math/units/factoring\\_and\\_primes\\_intro/](http://app.mobius.academy/math/units/factoring_and_primes_intro/)

1 Show the prime factorization of this number as exponents  114	a $2 \cdot 3 \cdot 19$	b $2 \cdot 3^2 \cdot 19$
	c $2 \cdot 3 \cdot 5 \cdot 19$	d $2 \cdot 3 \cdot 13 \cdot 19$

2 Show the prime factorization of this number as exponents  78	a $2 \cdot 3 \cdot 13$	b $2 \cdot 3 \cdot 11 \cdot 13$
	c $2^2 \cdot 3 \cdot 13$	d $2 \cdot 3^2 \cdot 13$

3 Show the prime factorization of this number as exponents  99	a $2 \cdot 3^2 \cdot 11$	b $3^2 \cdot 5 \cdot 11$
	c $3^2 \cdot 11$	d $3^2 \cdot 11 \cdot 13$

4 Show the prime factorization of this number as exponents  28	a $2^2 \cdot 3 \cdot 7$	b $2^2 \cdot 5 \cdot 7$
	c $2^2 \cdot 7$	d $2^2 \cdot 7 \cdot 13$

5 Show the prime factorization of this number as exponents  105	a $3 \cdot 5 \cdot 7^2$	b $3^2 \cdot 5 \cdot 7$
	c $3 \cdot 5 \cdot 7$	d $3 \cdot 5 \cdot 7 \cdot 13$

6 Show the prime factorization of this number as exponents  125	a $5^3$	b $5^4$	c $2 \cdot 5^3$

7 Show the prime factorization of this number as exponents  68	a $2^2 \cdot 13 \cdot 17$	b $2^2 \cdot 17$
	c $2^2 \cdot 11 \cdot 17$	