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Math worksheet on *'Prime Factorization as Exponents - 3 Factors (Level 1)'*. Part of a broader unit on *'Factoring and Greatest Common Factor - Intro'*

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1 Show the prime factorization of this number as exponents

28

a	b
$2^2 \cdot 7 \cdot 13$	$2^2 \cdot 7 \cdot 11$
c $2^2 \cdot 7^2$	**d** $2^2 \cdot 7$
e $2^3 \cdot 7$	**f** $2^2 \cdot 5 \cdot 7$

2 Show the prime factorization of this number as exponents

30

a	b
$2 \cdot 3 \cdot 5$	$2 \cdot 3^2 \cdot 5$
c $2 \cdot 3 \cdot 5 \cdot 7$	**d** $2 \cdot 3 \cdot 5 \cdot 11$
e $2 \cdot 3 \cdot 5 \cdot 13$	**f** $2^2 \cdot 3 \cdot 5$

3 Show the prime factorization of this number as exponents

8

a	b	c
2^3	$2^3 \cdot 7$	$2^3 \cdot 13$
d $2^3 \cdot 11$	**e** $2^3 \cdot 5$	**f** $2^3 \cdot 3$

4 Show the prime factorization of this number as exponents

12

a	b
$2^2 \cdot 3 \cdot 13$	$2^3 \cdot 3$
c $2^2 \cdot 3^2$	**d** $2^2 \cdot 3 \cdot 7$
e $2^2 \cdot 3 \cdot 5$	**f** $2^2 \cdot 3$

5 Show the prime factorization of this number as exponents

20

a	b
$2^2 \cdot 3 \cdot 5$	$2^3 \cdot 5$
c $2^2 \cdot 5 \cdot 7$	**d** $2^2 \cdot 5$
e $2^2 \cdot 5 \cdot 11$	**f** $2^2 \cdot 5 \cdot 13$

6 Show the prime factorization of this number as exponents

50

a	b
$2 \cdot 5^2 \cdot 13$	$2 \cdot 5^2 \cdot 11$
c $2 \cdot 5^2$	**d** $2^2 \cdot 5^2$
e $2 \cdot 3 \cdot 5^2$	**f** $2 \cdot 5^3$