

Factors (4-1)

<i>prime</i>	Decode <i>pr·ime</i>
Definition its only factors are 1 and itself	Example 11 1 11
<i>composite</i>	Decode <i>com·po·site</i>
Definition has <u>many</u> factors	Example 16 1 2 4 8 16

Example 1. List all of the **factors**.

I Do	You Do
30 1 2 3 5 6 10 15 30	31
45	87

Example 2. Write the **prime factorization** of each number. Tell whether it is **prime** or **composite**.

I Do	You Do
$2 \cdot 2 \cdot 2 \cdot 7$ $2^3 \cdot 7$ 56 composite 	83
101	180

Example 3. Write the prime factorization of each monomial.

I Do	You Do
$6ab$ $2 \cdot 3 \cdot a \cdot b$	$15n^3$ $3 \cdot 5 \cdot n \cdot n \cdot n$
$3x^3y^2$ $3 \cdot x \cdot x \cdot x \cdot y \cdot y$	$36s^4t$ $2 \cdot 2 \cdot 3 \cdot 3 \cdot s \cdot s \cdot s \cdot s \cdot t$ $2^2 \cdot 3^2 \cdot s^4 \cdot t$

