

NOTES

Exponents

4

7

exponent: a # that tells how many times to multiply the base to itself. (use it as a factor)

product: the answer to a mult. problem

$$= 4 \cdot 4 \cdot 4 \cdot 4 \cdot 4 \cdot 4 \cdot 4 = 16,384$$

factors: the #'s in a mult. problem that divide without a remainder.

Base: a # that is written as a factor as many times as the exponent.

	Mathematical Definition	My Definition
Decompose $6 \cdot 6 \cdot 6 \cdot 6 \cdot 6$	writing a base as a factor as many times as the exponent.	break into parts
Recompose 6^5	a repeated factor is written as a base and exponent with the base being the repeated factor and the exponent is the number of times the factor was repeated.	the parts are put back together

Examples:

Decompose	Recompose
$5 \cdot 5 \cdot 5$	5^3
$r \cdot r \cdot r \cdot r$	r^4
$\frac{1}{2} \cdot \frac{1}{2} \cdot \frac{1}{2} \cdot \frac{1}{2} \cdot \frac{1}{2}$	$(\frac{1}{2})^5$
$\frac{m}{n} \cdot \frac{m}{n} \cdot \frac{m}{n} \cdot \frac{m}{n} \cdot \frac{m}{n} \cdot \frac{m}{n}$	$(\frac{m}{n})^7$
$2.7 \times 2.7 \times 2.7 \times 2.7$	2.7^4
$(m-2) \cdot (m-2)$	$(m-2)^2$
$\frac{f+3}{4} \cdot \frac{f+3}{4} \cdot \frac{f+3}{4} \cdot \frac{f+3}{4} \cdot \frac{f+3}{4}$	$(\frac{f+3}{4})^5$