

# Exponent Notes

NOTES  
Exponents

**4** **7**

**exponent**: a # that tells how many times to multiply the base to itself.

**product**: the answer to a mult. prob.

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

**Factors**: the #'s in a mult. prob 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	break into parts
Recompose $6^5$	a repeated factor is written as a base and exponent	the parts are put back together

Examples:

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