

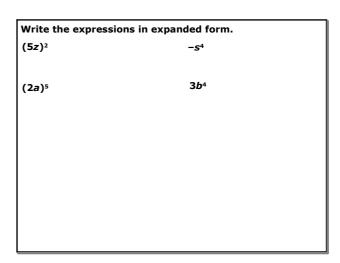
In an expression of the form  $a^n$ , a is the base, n is the exponent, and the quantity  $a^n$  is called a power. The exponent indicates the number of times that the base is used as a factor.

Base Exponent

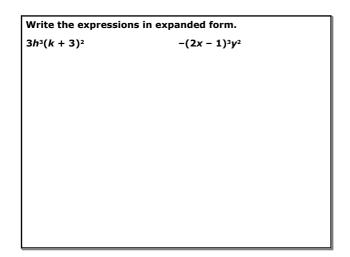
a is a factor n times

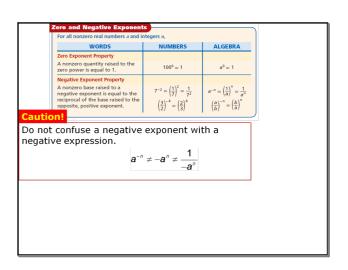
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A **power** includes a base and an exponent. The expression  $2^3$  is a power of 2. It is read "2 to the third power" or "2 cubed."



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Simplify the expressions.	$\left(\frac{2}{3}\right)^2$
(-5)-5	$\left[\frac{1}{3}\right]^{2}$

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Simplify the expressions. Assume all variables are nonzero.  $3z^{7}(-4z^{2}) \qquad \qquad \left(\frac{yz^{3}}{z^{5}}\right)^{3}$ 

Simplify the expressions. Assume all variables are nonzero.  $(5x^6)^3$   $(-2a^3b)^{-3}$ 

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