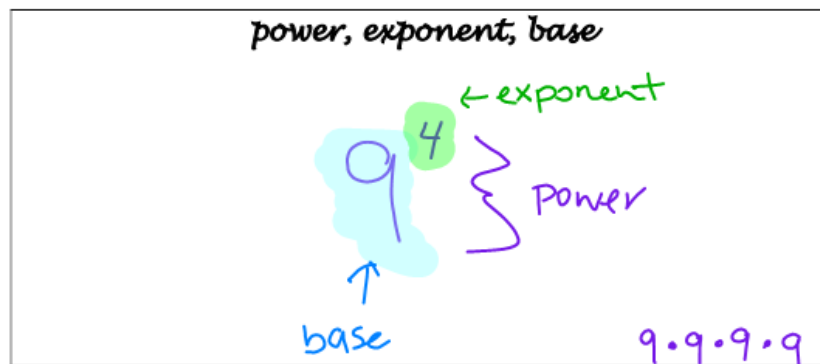


Simplifying Powers (3-1)



Raising to the zero power.

$$5^0 = 1$$

Example 1: Write with a positive exponent.

I Do	We Do
10^{-3} 	10^{-4}

Example 2: Simplifying Negative Exponents

I Do	We Do	You Do
$(-2)^3$ $-2 \cdot -2 \cdot -2$ $4 \cdot -2$ -8	-2^3 $-(2 \cdot 2 \cdot 2)$ $4 \cdot 2$ -8	$(-3)^3$ $-3 \cdot -3 \cdot -3$ $9 \cdot -3$ -27

I Do	We Do	You Do
$(-2)^{-3}$ $\frac{1}{(-2)^3}$ $\frac{1}{-2 \cdot -2 \cdot -2}$ $\frac{1}{-8}$ $-\frac{1}{8}$ or $\frac{1}{8}$	3^{-4} $\frac{1}{3^4}$ $\frac{1}{3 \cdot 3 \cdot 3 \cdot 3}$ $\frac{1}{81}$	4^{-3} $\frac{1}{4^3}$ $\frac{1}{4 \cdot 4 \cdot 4}$ $\frac{1}{64}$

$\frac{16}{64}$