

Person 1: _____

Person 2: _____

Intro to Rules of Exponents:

~~A~~ Negative exponent means reciprocal

Complete the table with your shoulder partner ~~A~~ zero exponent = 1

Input	Process Column	Output
3^{-3}	$\frac{1}{3 \cdot 3 \cdot 3}$	$\frac{1}{27}$
3^{-2}	$\frac{1}{3 \cdot 3}$	$\frac{1}{9}$
3^{-1}	$\frac{1}{3}$	$\frac{1}{3}$
3^0	$\frac{1}{3}$	1
3^1	3	3
3^2	$3 \cdot 3$	9
3^3	$3 \cdot 3 \cdot 3$	27
3^4	$3 \cdot 3 \cdot 3 \cdot 3$	81
3^5	$3 \cdot 3 \cdot 3 \cdot 3 \cdot 3$	243

Reciprocals

$\div 3$

$\times 3$

Example: $(X^3)(X^2) = X^5$

$(X \cdot X \cdot X)(X \cdot X)$

Simplified
Output

$\frac{1}{X^2}$

$\frac{1}{X} \quad 1 \quad X^2 \quad X^3 \quad X$

Process

$\frac{1}{X \cdot X}$

$\frac{1}{X}$

$\frac{X}{X}$

X

$X \cdot X$

X

$X \cdot X \cdot X$

$X^{-2} \quad X^{-1} \quad X^0 \quad X^{-1} \quad X^2 \quad X^3 \quad X$