

Practice with Exponents

Complete the table by raising each base to each exponent. Some example entries are provided.

Exponents <u>across</u> → Bases down ↓	-3	-1	0	2	3
0	$0^{-3} = \frac{1}{0^3}$ undefined		0^0 indeterminate		
1					
2		$2^{-1} = \frac{1}{2^1} = \frac{1}{2}$			
3			$3^0 = 1$		
4					
5				$5^2 = 25$	
6					$6^3 = 216$
-1	$(-1)^{-3} = \frac{1}{(-1)^3} = -1$				
-2					
-3		$(-3)^{-1} = \frac{1}{-3} = -\frac{1}{3}$			
-4					
$\frac{1}{2}$	$\left(\frac{1}{2}\right)^{-3} = \left(\frac{2}{1}\right)^3 = 8$				
$\frac{1}{3}$					
$\frac{1}{4}$					
$\frac{1}{5}$					
$-\frac{1}{2}$					
$-\frac{1}{3}$					
$-\frac{1}{4}$	$\left(-\frac{1}{4}\right)^{-3} = \left(-\frac{4}{1}\right)^3 = -64$				
$-\frac{1}{5}$					