

Powers of Ten

Powers	Multiplied	Standard Notation	Number of Zeros
10^0		1	0
10^1	10	10	1
10^2	$10 \cdot 10$	100	2
10^3	$10 \cdot 10 \cdot 10$	1,000	3
10^5	$10 \cdot 10 \cdot 10 \cdot 10 \cdot 10$	100,000	5
10^8	$10 \cdot 10 \cdot 10 \cdot 10 \cdot 10 \cdot 10 \cdot 10 \cdot 10$	100,000,000	8

Negative Powers of Ten

Powers	Multiplied	Standard Notation	Number of Places Right of the Decimal
10^{-2}	$\frac{1}{10 \cdot 10}$	0.01	2
10^{-3}	$\frac{1}{10 \cdot 10 \cdot 10}$	0.001	3
10^{-5}	$\frac{1}{10 \cdot 10 \cdot 10 \cdot 10 \cdot 10}$	0.00001	5
10^{-8}	$\frac{1}{10 \cdot 10 \cdot 10 \cdot 10 \cdot 10 \cdot 10 \cdot 10 \cdot 10}$	0.00000001	8

What pattern do you see?