

STUDY LINK
7·1

Exponents



In exponential notation, the **exponent** tells how many times the **base** is used as a factor. For example, $6^4 = 6 * 6 * 6 * 6 = 1,296$. The base is 6, and the exponent is 4. The product is written as 1,296 in standard notation.

1. Complete the table.

Exponential Notation	Base	Exponent	Repeated Factors	Standard Notation
9^3	9	3	$9 * 9 * 9$	729
	4	5		
			$7 * 7 * 7 * 7$	
			$10 * 10 * 10 * 10 * 10 * 10$	
				262,144

Describe the mistake. Then find the correct solution.

2. $6^3 = 6 + 3 = 9$

Mistake: _____

Correct solution: _____

3. $2^9 = 9 + 9 = 18$

Mistake: _____

Correct solution: _____

4. $4^7 = 4 * 7 = 28$

Mistake: _____

Correct solution: _____

Practice

5. $351.82 + n = 366.52$

6. $100 - r = 99.52$

7. $\frac{4}{7} + u = \frac{19}{7}$

$n =$ _____

$r =$ _____

$u =$ _____

