

Name: _____ Date: _____

Mathematics

Expanded and Exponential Form

Rewrite each expression using exponents.

example: $7 \times 7 \times 7 \times 7 - 7^4$

$6^5, 3^4, 2^7, 31^6, 9^2, 14^3$

- a. $6 \times 6 \times 6 \times 6 \times 6$ _____
- b. $3 \times 3 \times 3 \times 3$ _____
- c. $2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 2$ _____
- d. 9×9 _____
- e. $31 \times 31 \times 31 \times 31 \times 31 \times 31$ _____
- f. $14 \times 14 \times 14$ _____

Rewrite each exponent in expanded form.

example: $5^6 - 5 \times 5 \times 5 \times 5 \times 5 \times 5$

- g. 8^4 - _____
- h. 4^9 - _____
- i. 13^2 - _____
- j. 100^6 - _____

Rewrite each exponent in standard form.

example: $6^3 - 216$

- k. 5^2 _____
- l. 7^4 _____
- m. 4^3 _____
- n. 9^3 _____
- o. 11^2 _____
- p. 2^6 _____

The meaning of Zero

Fill in the blanks with the correct number

1. $9 + 0 =$ _____

2. $163 - 0 =$ _____

3. $0 + 29 =$ _____

4. $200 + 224 + 0 =$ _____

5. $25 - 4 - 0 =$ _____

6. $6 \times 0 \times 8 =$ _____

7. $13 \times 0 =$ _____

8. $0 \div 8 =$ _____

9. $7 + 0 + 13 =$ _____

10. $19 + 0 - 5 =$ _____

11. $0 \div 16 =$ _____

12. $5 \times 0 + 7 =$ _____