

Simplifying Exponentials

An exponent tells you how many times the base is used as a factor.

Example: Write 3^4 in standard notation.

The exponent is 4, so write the base 4 times.

$$3^4 = 3 \times 3 \times 3 \times 3.$$

Write the following expressions in standard notation.

1. 2^6

2. 5^3

3. 4^7

4. 12^2

5. 9^1

6. 20^5

7. 6^3

8. 3^6

9. 10^4

Write the following expressions in exponential notation.

1. $6 \times 6 \times 6$

2. $3 \times 3 \times 3 \times 3 \times 3 \times 3$

3. 10×10

4. $21 \times 21 \times 21 \times 21$

5. $1 \times 1 \times 1 \times 1 \times 1 \times 1 \times 1$

6. $8 \times 8 \times 8 \times 8 \times 8$

7. $5 \times 5 \times 5 \times 5 \times 5 \times 5$

8. $2 \times 2 \times 2$

9. $4 \times 4 \times 4 \times 4$