MY Homework

Homework Helper

eHelp

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Write 6 × 6 × 6 using an exponent.

The base is 6. Since 6 is used as a factor three times, the exponent is 3.

So, $6 \times 6 \times 6 = 6^3$.

Practice

Write each product using an exponent.

1. $10 \times 10 \times 10 =$ _____

2. $12 \times 12 =$ _____

Write each power as a product of the same factor. Then find the value.

3. $3^7 =$ _____

4. $10^6 =$ _____

Write the prime factorization of each number using exponents.

5. $20 =$ _____

6. $50 =$ _____

Problem Solving

7. Mathematical **PRACTICE** 8 **Look for a Pattern** The Newfoundland is a large breed of dog. It weighs about 10 × 10 pounds. Write 10 × 10 using an exponent. Then find the value of the power. How many pounds does the Newfoundland weigh?

I am hungry.
FEED ME!

120
130
150
100

_____

8. The area of San Bernardino County, California, the largest county in the United States, is about 3^9 square miles. Write this as an expression. What is the area of San Bernardino County?

_____

_____

Vocabulary Check

Vocab

Fill in each blank with the correct term or number to complete each sentence.

9. Numbers expressed using exponents are called _____.

10. The exponent indicates how many times the _____ is used as a factor.

Test Practice

11. A 100-pound person on Earth would weigh about 4 × 4 × 4 × 4 pounds on Jupiter. Evaluate the expression to determine how much a 100-pound person would weigh on Jupiter.

Ⓐ 16 pounds   Ⓒ 256 pounds

Ⓑ 64 pounds   Ⓓ 1,024 pounds

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