

Lesson 6-5 • Apply Day

Reinforce Understanding

Evaluating Algebraic Expressions

I can write an algebraic expression for a real situation and evaluate it for a given value of the variable.

Worked model

Find the value of $6b - 9$ when $b = 7$.

1. Write the expression. $6b - 9$
2. Substitute the given value for the letter. $6 \times 7 - 9$
3. Follow the order of operations. $42 - 9$
4. Evaluate. 33

Answer: When $b = 7$, the value of $6b - 9$ is 33.

Practice

Complete each exercise. Show the reasoning that supports your answer.

1. (Lesson 6.3) Evaluate the new power 3^2 .

Complete each step, then write the final answer.

1. Write the base as repeated factors: ____.
2. Multiply the factors: ____.

Answer: _____

2. (Lesson 6.3) Evaluate the new power 4^3 .

Complete each step, then write the final answer.

1. Write the base as repeated factors: ____.
2. Multiply the factors: ____.

Answer: _____

3. (Lesson 6.3) Evaluate the new power 5^4 .

Complete each step, then write the final answer.

1. Write the base as repeated factors: ____.
2. Multiply the factors: ____.

Answer: _____