Lesson 14: Solving Logarithmic Equations

Classwork

Opening Exercises

Convert the following logarithmic equations to exponential form:

**Examples 1–3**

Write each of the following equations as an equivalent exponential equation, and solve for .



Exercises

1. Drew said that the equation cannot be solved because he expanded and realized that he cannot solve the equation Is he correct? Explain how you know.

Solve the equations in Exercises 2–4 for .



Solve the logarithmic equations in Exercises 5–9, and identify any extraneous solutions.

Problem Set

1. Solve the following logarithmic equations.
2. Solve the following logarithmic equations.
3. Solve the following logarithmic equations.
4. Solve the following equations.

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