Name Date

Notetaking with Vocabulary

For use after Lesson 2.4

2.4

In your own words, write the meaning of each vocabulary term.

equation

solve an equation

formula

Core Concepts

Algebraic Properties of Equality

Let *a*, *b*, and *c* be real numbers.

Addition Property of Equality If 

Subtraction Property of Equality If 

Multiplication Property of Equality If 

Division Property of Equality If 

Substitution Property of Equality If  can be substituted for *b*   
 (or *b* for *a*) in any equation or expression.

Notes:

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Notetaking with Vocabulary **(continued)**

Distributive Property

Let *a*, *b*, and *c* be real numbers.

Sum  Difference 

Notes:

Reflexive, Symmetric, and Transitive Properties of Equality

Real Numbers Segment Lengths Angle Measures

Reflexive Property   

Symmetric Property If  then If  then If  then  
   

Transitive Property If  and If  and If  and  
 then  then then  
   

Notes:

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Notetaking with Vocabulary **(continued)**

Extra Practice

In Exercises 1–3, solve the equation. Justify each step.

1. 

2. 

3. 

In Exercises 4 and 5, solve the equation for the given variable. Justify each step.

4. 

5. 

6. The formula for the surface area *S* of a cone is  where *r* is the radius   
and *s* is the slant height. Solve the formula for *s*. Justify each step. Then find the slant   
height of the cone when the surface area is 113 square feet and the radius is 4 feet.   
Approximate to the nearest tenth.