REVIEW: Writing Algebraic Expressions and Equations

Key Concept and Vocabulary

Phrase: Two more than a number

Expression: $2 + n$
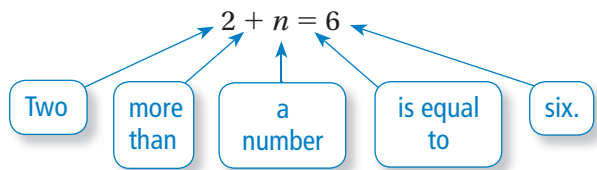
Sentence: Two more than a number is equal to six.

Equation: $2 + n = 6$

Variables

Visual Model

$$2 + n = 6$$

Two	more than	a number	is equal to	six.

Skill Examples

1. Five times a number: $5n$

2. Six less than three times a number: $3n - 6$

3. The sum of a number and one: $n + 1$

4. A number divided by three: $n \div 3$

Application Example

5. Write an equation for the following. *"The price of $15 is the wholesale cost plus a markup of fifty percent."*

   Let C be the wholesale cost.

   50% of C is $0.5C$.

   ∴ An equation is $15 = C + 0.5C$.

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Check your answers at BigIdeasMath.com.

Write the verbal phrase as an algebraic expression.

6. The product of a number and two

   _____

7. 10 subtracted from a number

   _____

8. 19 less than twice a number

   _____

9. The sum of a number and three, divided by four

   _____

10. Five times the sum of a number and two

    _____

11. Seven less than four times a number

    _____

Write the sentence as an equation.

12. Three times a number equals nine.

    _____

13. The difference of a number and nine is four.

    _____

14. Twelve divided by a number is four.

    _____

15. The sum of a number and seven is eighteen.

    _____

16. The volume of a cone is one-third the area of the base times the height. A cone has a volume of 20π cubic inches. Write an equation that can be used to solve for the height of the cone.

    _____

h

$B = 4\pi \text{ in.}^2$