Lesson 5.2 Parts of an Expression

A **variable** is a symbol, usually a letter of the alphabet, that stands for an unknown number, or quantity. a = variable

An **algebraic expression** is a combination of numbers, variables, and at least one operation. $x + 13$

A **term** is a number, variable, product, or quotient in an algebraic expression. In $3a + 5$, $3a$ is a term and 5 also is a term.

The term $3a$ means $3 \times a$. The number 3 is the coefficient of a. A **coefficient** is a number that multiplies a variable. In the expression $x + 5$, the coefficient of x is understood to be 1.

An **equation** is a sentence that contains an equal sign. $x + 13 = 25$

Identify each of the following as an *expression* or an *equation*.

	a	**b**	**c**
1.	$3 + x$ _____	$7 + 4 = 11$ _____	$55 \times n$ _____
2.	$x - 7 = 15$ _____	$b - 45$ _____	$24 = 6 \times 4$ _____

For each term below, identify the coefficient and the variable.

a　　　　　　　　　　　　　　　　　　　**b**

3. $3x$ coefficient _____ variable _____　　　$4y$ coefficient _____ variable _____

4. z coefficient _____ variable _____　　　$5n$ coefficient _____ variable _____

5. $7b$ coefficient _____ variable _____　　　m coefficient _____ variable _____

6. r coefficient _____ variable _____　　　$6d$ coefficient _____ variable _____

Translate each phrase into an algebraic expression.

7. five more than n _____　　　　　　eight decreased by x _____

8. x added to seven _____　　　　　　the product of n and 11 _____

Translate each sentence into an equation.

9. Six times a number is 18. _____　　　Seventy less a number is 29. _____

10. Eight divided by a number is 2. _____　　The product of 7 and 12 is 84. _____

Write the following expressions in words.

11. $6 - n = 3$ _____

12. $5 \times 13 = 65$ _____