## NAME

Module 4 Solving Problems Using Linear Equations of One Variable
Lesson 1 Translating Sentences into Algebraic Equations

## Lesson Objective

- Write sentences as algebraic equations.

Fill in the chart with the commonly used word phrases for each operation as discussed in the lesson.

| Addition | Subtraction | Multiplication | Division | Equals |
| :---: | :---: | :---: | :---: | :---: |
| the sum of | minus | times | the quotient of | equals |
| increased by | subtracted from | product | divided by | is equal to |
| plus | decreased by | multiplied by |  | is equivalent to |
| more than | the difference of | double |  | is the same as |
| added to | less than | triple |  | is identical to |
| the total of |  |  | is |  |

An equation is a mathematical sentence that uses an equal sign to state that two expressions are equal.


Translate into an equation: The product of six and a number is the same
as twelve. $6 r=12$
(2) Translate into an equation: Twice a number increased by 1 equals 5 .
$\underline{2 y+1=5}$
(3) Translate into an equation: Four less than six times a number is equal to seven.
$6 s-4=7$
Translate into an equation: Three times the sum of a number and five is the same as twenty-seven. $3(x+5)=27$
(5. Translate into an equation: The product of a number $n$ and the sum of the number $n$ and six is the same as the number $n$ squared. $n(n+6)=n^{2}$
(6) Translate into an equation: Fred had $d$ dimes that totaled $\$ 7.50$.

$$
0.10 d=\$ 7.50
$$

(7) Translate into an equation: Mrs. Beetle is three times as old as her daughter.

The sum of their ages is forty-eight years. $A+3 A=48$

