Name _____ Class _____ Date _____

Reteaching 1-1

Using Variables

OBJECTIVE: Using variables as a shorthand way of expressing relationships

MATERIALS: None

You often hear word phrases such as *half as much* or *three times as deep*. These phrases describe mathematical relationships. You can translate word phrases like these into mathematical relationships called *expressions*.

Example

Translate the following word expressions into algebraic expressions.

the sum of x and 15

$x + 15$

Remember that "sum" means to add.

seven times x

$7x$

Remember that "times" mean to multiply.

Example

Translate the following word sentence into an algebraic equation.

The weight of the truck is two times the weight of the car.

The weight of the truck = is two times the weight of the car.

$t = 2 \cdot c$

← **Write an equal sign under the word *is*. Whatever is written to the left of *is* belongs on the left side of the =. Whatever is written to the right of *is* belongs on the right side of the =.**

← **Represent the unknown amounts with variables.**

$t = 2c$ ← **The translation is complete. Check to make sure you have translated all parts of the equation.**

Exercises

Translate the following word expressions and sentences into algebraic expressions or equations.

1. a number increased by 5
2. 8 subtracted from a number
3. a number divided by 9
4. 3 less than five times a number
5. A number multiplied by 12 is 84.
6. 7 less than n is 22.
7. 8 times a number x is 72.
8. A number divided by 3 is 18.