

Grade 7 Math
Unit 1 Notes: Patterns & Relations

Section 1.7: Reading and Writing Equations

- **An equation is a statement that two expressions are equal. An equation will ALWAYS have an “equal sign =” in it!**

Think $2 \times 6 = 12$ (The expression 2×6 is equal to the expression 12)

In algebra:

$3x + 1$ is an algebraic expression.

7 is an expression

$3x + 1 = 7$ is an equation.

In words we write:

One more than triple a number is seven.

- How to write an equation from a statement.
 1. Choose a letter for the variable.
 2. Write an algebraic expression to represent the relationship.
 3. Write an equals sign between the expression and the constant term.

Ex. #1: Four more than a number is 17

Let x , represent the number.

Four more than the number: $x + 4$.

The equation is: $x + 4 = 17$

Ex. #2: A number divided by three is nine.

Let h represent the number.

h divided by 3: $h \div 3$

The equation is: $h \div 3 = 9$