## 1.7 Reading and Writing Equations

Brainstorm:

Write an algebraic expression for these statements:

- Take any number
- Multiply it by 3
- Add 4

The answer is 13. What is the original number?

Try this:

- Zenna bought 3 CDs.
- Each CD costs the same amount.
- The total cost as \$36. What was the cost of 1 CD?



- We can write an equation for this situation.
- Let *p* dollars represent the cost of 1 CD.
- Then, the cost of 3 CDs is 3*p*. This is equal to \$36.

We can write an equation to represent this situation:

3*p=36* 

## 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  $2 \times 6$  is equal to the expression 12)

## In algebra:

- 3x + 1 is an algebraic expression.
- 7 is an expression.

3 x + 1 = 7 is an equation

## In words we write:

One more than triple a number is seven.

1. Choose a letter for the variable



3n+1

- 2. Write an algebraic expression to represent the relationship.
- 3. Write an equals sign between the expression and the constant term. 3n+1=7

Eg. Four more than a number is 17	Eg. A number divided by three is nine.
1. Variable: x	1. Variable: h
2. Four more than the number: x +4	2. h divided by 3: h ÷ 3
3. The equation is: x + 4 = 17	3. The equation: $h \div 3 = 9$

Practice Together: p. 36 a-e

Homework: p. 36 ALL