## WRITING EQUATIONS

You can follow these simple steps when writing equations. First, you want to identify the unknown, which is your variable. What are you trying to solve for?

Example: a number increased by 5 is 7

We are trying to figure out what number is increased by 5.

Let **X** stand for "a number".

Also, look for key words that will help you write the equation. Let's highlight the key words and write an equation to match the problem.

Example: <u>a number</u> increased by 5 is 7

We know that "increased by" tells us this is an addition problem.

The word "is" tells us to use an equal sign.

When we write an equation, it should look like this: X+5=7.

## The following key words will help you write equations:

ADD +	SUBTRACT -	MULTIPLY x	DIVIDE ÷	EQUALS =
more than	less than/ fewer than	of	out of	is
increased by	decreased by	multiplied by	divided by	are
the sum of	difference between/of	product of	quotient of	was
plus	minus	times	per/a	were
added to	subtracted from			will be
combined, together	gave away/sold/ used/ lost			gives
total				sold for

## WRITING INEQUALITIES

You can follow the same rules for writing inequalities. First, identify the unknown. What are you trying to solve for? Use a variable.

Example: Jill is at least 12 years old. We are trying to figure out how old Jill is.

Let **X** stand for Jill's age.

Now, look for key words that will help you write the inequality. Let's highlight the key words and write an inequality to match the problem.

Example: Jill is at least 12 years old.

We know that "at least" tells us that we should use a greater than or equal sign, or  $\geq$ .

When we write an inequality, it should look like this:  $X \ge 12$ .

## The following key words will help you write equations:

< IS LESS THAN	> IS GREATER THAN	S LESS THAN OR EQUAL TO	> IS GREATER THAN OR EQUAL TO
less than	more than	no more than	at least