

Variables Worksheet

What is a variable?

They stand for a value that can be changed. Think of variables as containers. They hold values that can range from numbers to words to objects and can be changed anytime.

Example 1

$x=4$

- In this statement x is the variable.
- The number stored in x is 4.

Example 2

$x=4;$

$x=5;$

$x=x+4;$

Now what is the value of x ?

- Although we originally set the value of x to be 4, in the next line we change the value of x to 5.
- In the last statement we set x to equal $x+4$,
so $x = (5) + 4$
 $x = 9$

When we made the Scratch program *What's your Name?* many students named the variable after their actual name. Why is this bad?

Think back to the definition of a variable. They are containers, so their value may change.

Originally we could have:

$Amanda=Amanda$ (Maybe this makes sense)

but along comes another user named Mary, then we change the value of the variable to Mary

$Amanda=Mary$ (This does not make sense)

What would be a better variable name? _____

So while the contents in a variable may change, the name of the variable does not.