Name _____ Period _____

Skill 19.01 Exercise 1
What is the purpose of variables in computer programs?
(blank space)
What type of data is stored in each of the variables below?

`var a = 10;`	
`var b = "hello!";`	
`var c = true;`	
`var d = [1, 2, 3, 4, 5]`	
`var e = 3.14;`	

Skill 19.02 Exercise 1
You want to create a number guessing game. When the game loads, a secret number will be generated. Then the user will be provided 3 guesses to identify the number. What variables would you need to store the necessary data for the game?
(blank space)
For each variable, write statements to show how you would declare and/or initialize the variable
(blank space)

Skill 19.03 Exercise 1

Indicate whether each of the following variable declarations are legal or illegal. If it is illegal, indicate why.

code	legal/illegal
var 1231abc;	
var big-number;	
var name2;	
var myVar*2;	
2 = var myNum;	
var var;	

Skill 19.04 Exercise 1	
For each of the following indicate what is printed as the output. If an error occurs, indicate the error.	
Code	**Output**
| ```
var x = 10
var y = x
x = y
console.log(y)
``` | |
| ```
var x = y = z = 5
console.log(x)
console.log(y)
console.log(z)
``` | |
| ```
var a = 5
console.log(a)
var b = 10
console.log(b)
var c = a
console.log(c)
a = b
b = c
console.log(a)
console.log(B)
``` | |
| ```
var score = 10;
var score = 5;
var score = 11;
console.log(score)
``` | |

Skill 19.05 Exercise 1

Indicate what is printed for each of the following. If an error occurs, indicate the error and why.

```
var x = 2
var y = 3
var z = x + y
x = x + z
console.log(x+1)
```

```
var x = 1
var y = 5
var z = x - y
x = x - z
console.log(x-1)
```

```
var x = 2
var y = 3
var z = x ** y
x = x * z
console.log(x*2)
```

```
var x = 9
var y = 3
var z = x/y
x = x/z
print(x/3)
```

```
var x = 11
var y = 3
var z = x%y
x = x%z
print(x%2)
```

Skill 19.06 Exercise 1	
Indicate the variable type printed for each statement	
console.log(3.14)	
console.log ("four")	
console.log("6.0")	
console.log(-8*2)	
console.log(10/5)	
console.log(-22345)	
console.log("5")	

Skill 19.07 Exercise 1

Write code to
(a) Concatenate two strings 'Hello' and 'World' inside a console.log statement
(b) Concatenate the strings 'Hello' and 'World' inside a console.log statement, but make sure to use string concatenation to also include a space (' ') between the two words.

Skill 19.08 Exercise 1

Indicate the output of the following

```
console.log(" Blah "+  5+10 + " Blah Blah " + 5+10);
```

```
console.log(5*10 + " Blah Blah " + 5*10);
```

```
console.log(" Blah "+  10-5 + " Blah Blah " + 10-5);
```

Skill 19.08 Exercise 2

The code does not work as intended. Fix the code.

```
var x = "5";
var y = "5";
console.log(x + y - 10);
```

Skill 19.09 Exercise 1

Write code to prompt a user for 3 pieces of information. Concatenate the pieces of information into a new variable called result, the print result.

Skill 19.10 Exercise 1

Re-write the following in pseudocode,

```
var x = y = z = 5
console.log(x)
console.log(y)
console.log(z)
```