$\qquad$

1. What is output by the following:
```
String a = "sticks";
System.out.println(a.indexOf("h"));
```


## 2. What is output by the following:

```
String a = "sticks";
System.out.println(a.substring(3));
```

3. The Assignment class performs as indicated in the following table.

| Command | Ouput |
| :--- | :--- |
| Assignment $a=$ new Assignment("Math"); | <no output> |
| System.out.println(a); | 1. Math |
| Assignment b $=$ new Assignment("APCS"); | <no output> |
| System.out.println(b); | 2. APCS |
| b.done(); | <no output> |
| System.out.println(b); | 2. APCS (completed) |

Write the complete Assignment class here:
4. What it output when this code runs?

```
int h=10;
h--;
h/=3;
h+=h;
System.out.println(h);
```

5. Write a line which prints num to the $\mathbf{p}$ power, assuming both num and $\mathbf{p}$ are integers and are properly initialized:
6. Assume String array words is properly initialized with valid Strings. Write code to check the contents of String array words and count and print the number of entries where the first letter is the same as the last letter:
7. Referring as necessary to the Frog class to the right, write code below that does the following:

Create a 1000 element Frog array.
Instantiate each Frog.
Hop each Frog its index value. So the Frog at location 0 gets hopped zero (sadly, it does not really get to hop) and the Frog at index 999 hops 999 spaces.)

```
class Frog
{
    private int location;
    public Frog()
        {location=0; }
    public void hop(int n)
        {location+=n; }
    public int getLocation()
        {return location;}
    public String toString()
        {
            String temp = "";
            for(int i = 0;i<location;i++)
                {temp+=".";}
            return temp+"@";
    }
}
```

8. Simplify this boolean expression:
```
!( x<y || ( x<=7 && y!=6 ) )
```

9. Write code to declare a String array that contains your first and last name as separate Strings using an array initializer.
10. Problem 10 refers to the code to the right.
mrHops is an instance of the class Frog.
```
Frog mrHops = new Frog();
```

circle one: True or False

