AP Computer Science Midterm Practice 1 Name_____

1. State the output of the following lines of code. Note: some will result in an error.

```
System.out.println("I'm not sure");
System.out.println("\nH\ni");
System.out.println("\"Hello World\"");
System.out.println("Hello "World"");
System.out.println("\\");

int grade = 95;
System.out.println(grade/10);
System.out.println(grade/10.0);
System.out.println((double) (grade/10));
System.out.println((double) grade/10);

String c = "I love pizza!";
System.out.println(c.indexOf("zz"));
System.out.println(c.indexOf("noodles"));
System.out.println(c.substring(5,8));
System.out.println(c.substring(7));

String fruit1 = new String ("apples");
String fruit2 = new String ("bananas");
String fruit3 = new String ("apples");
System.out.println(fruit1.compareTo(fruit2) < 0);
System.out.println(fruit2.compareTo(fruit1) < 0);
System.out.println(fruit1.compareTo(fruit2) == 0);
System.out.println(fruit1 ==  fruit3);
System.out.println(fruit1.equals(fruit3));
System.out.println(fruit1.compareTo(fruit3));
```

2. Which one of the following pairs of declarations will produce an error?

```
double myDoub = 9.8;
 int myInt = myDoub;
```

```
double myDoub = 9.8;
int myInt = (int) myDoub;
```

```
int myInt = 88;
double myDoub = myInt;
```

```
int myInt = 88;
double myDoub = (double) myInt;
```

3. Which numbered statement below will cause an error to occur if x=0 and y=1?

```
if ((x != 0) && (y/x == 0)) { // line 1
     // other code not shown
}

if ((x == 0) || (y/x == 0)) { // line 2
     // other code not shown
}
```

4. Assume that p, q, and r are boolean variables. Consider the following expression.

```
!((p && !q) || r)
```

Which of the following expressions is equivalent to the given expression?

a) (p && r) || (!q && r)
b) (!p || q) && !r
c) (p && !q) || r
d) (!p && !q) || (!p && r)
e) (!p && q) || !r