

AP CS: Lesson 5: Parameters

Name: _____ Period: _____

Java Syntax:

Method creation:

```
public static void name(type <parameter name>, ..., type <parameter name>) {  
    statement;  
    ...  
    statement;  
}
```

```
name(); // Calling a Static Method with no parameters  
name (value, value, ..., value); // Calling a Method with parameter(s)
```

Primitive Types: (Review)

```
int name = <value>; // create an Integer  
double name = <value>; // create an Double - real numbers  
char name = '<single character>'; // create a single character  
boolean name = true; // creates a Boolean of true or false.
```

Other Types:

```
String name = "<series of characters>"; // creates a String and assigns value
```

Class Notes:

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Parameter Mystery (taken from: [Building Java Programs](#), by Stuart Reges and Marty Stepp – online Chapter 3 Lab Exercises)

1. What output is produced by the following program?

```
public class ParameterMystery1 {
    public static void main(String[] args) {
        int a = 4, b = 7, c = -2;
        mystery(a, b, c);
        mystery(c, 3, a);
        mystery(a + b, b + c, c + a);
    }

    public static void mystery(int c, int a, int b) {
        b -= 2;
        c = a + 5;
        a = a - b;
        System.out.println(b + " + " + c + " = " + a);
    }
}
```

2. What output is produced by the following program?

```
public class ParameterMystery2 {
    public static void main(String[] args) {
        String major = "fred";
        String fred = "computer";
        String computer = "department";
        String department = "student";
        String student = "major";

        sentence(major, fred, department);
        sentence(student, computer, fred);
        sentence("fred", "honor", computer);
        sentence("foo", "bar", "baz");
        sentence(fred, computer, student);
    }

    public static void sentence(String major, String fred, String foo) {
        System.out.println("Many a " + foo + " in the " + fred + " of " + major);
    }
}
```

3. What output is produced by the following program?

```
public class ParameterMystery3 {
    public static void main(String[] args) {
        String a = "king";
        String b = "two";
        String c = "queen";
        String two = "five";

        sentence(a, b, c);
        sentence("b", c, c);
        sentence(two, "two", a);
        sentence(c, a, b);
        sentence(two, "queen", b);
    }

    public static void sentence(String b, String c, String a) {
        System.out.println("a " + c + " and a " + a + " beats a " + b);
    }
}
```