

AP CS: Lesson 9: Math Returns & if/then/else

Name: _____ Period: ____

Java Syntax:

Adding Returns...

Method creation:

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

```
variable = name (value1, value2, ..., valueN); // calls the Method "name"
// with the parameters values: value1 – valueN and
// returns a value to variable
```

Example Method with parameters and return value:

```
public static int addThree(int oneValue, int twoValue, int threeValue) {
    int sum = oneValue + twoValue;
    sum = sum + threeValue;
    return sum;
}
```

Example Method call with parameters and returned value (statements from another method):

```
mySum = addThree(100, 20, 3); // assigns integer 123 to the
// existing integer variable, mySum
int addedValues = addThree(100, 20, 3); // assigns integer 123 to newly
// created integer variable, addedValues
```

if Statement:

```
if (test) {
    statement(s);
}
```

if Example:

```
if (GPA >= 3.5) {
    System.out.println("You are so smart");
}
```

if / else Statement:

```
if (test) {
    statement(s);
} else {
    statement(s);
}
```

if / else Example: (exactly one path will be executed)

```
if (GPA >= 3.5) {
    System.out.println("You are so smart");
} else {
    System.out.println("Study more please");
}
```

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if / else / if Statement: (one or no path may be executed)

```
if (test) {  
    statement(s);  
} else if {  
    statement(s);  
}
```

Nested if / else / if Example:

```
if (place = 1) {  
    System.out.println("Gold Medal!");  
} else if (place = 2) {  
    System.out.println("Silver Medal!");  
} else if (place = 3) {  
    System.out.println("Bronze Medal!");  
}
```

Class Notes:

Exit Ticket - Please answer and return at end of period. Thanks.

1. I understand how to use Math methods for calculations: Yes Somewhat No
2. I understand how to use Scanners to collect console input: Yes Somewhat No
3. I understand how to return a value from a method: Yes Somewhat No
4. I understand how to use an if/else conditional: Yes Somewhat No

Additional comments, especially if you answered "No" to any of the above what would you like to more details on? Thanks
