

Name: _____ CM: _____ Grade: _____

This quiz is due after you have finished watching the **Configuring C Workspace, First C Program, Why C, Strings and Printf, Scanf, Structs, and Point** videos. Feel free to complete the quiz as you watch.

Video: Why C

1. What does "static typing" mean?

Video: Strings and Printf

2. **True** or **False** (circle one), the literals "C" and 'C' mean the same thing in C.

We skip the video on ifs and whiles in C, since they are identical to Java, except there is no Boolean type in C: instead ints are used: 0 is false, anything else is true.

3. How many Xs would each print? (Be careful!)

```
_____
int m = 5;
while (m) {
    printf("X");
    if (m % 2 == 0) break;
    m--;
}
```

```
_____
int m;
for (m = 0; m < 6; m++) {
    printf("X");
}
```

Video: Scanf

4. Why do we pass an address of the input variable to the `scanf()` function?

5. Suppose we have the following C code:

```
int day, month, year;
printf("Enter your birthday: ");
fflush(stdout);
scanf("%d/%d/%d", &day, &month, &year);
```

What would be the appropriate input to type at the prompt?

Video: Structs

6. `#define` is often used to define named _____.
7. If we want to name a new type in C, we use _____.
8. C structs can be used to group together:
 - a. Just heterogeneous data
 - b. Just homogeneous data
 - c. Both heterogeneous and homogeneous data
9. The individual members of a `struct` are accessed using the _____ operator.
10. Suppose we had a struct with three fields like so:

```
typedef struct {  
    int areaCode;  
    int exchange;  
    int line;  
} Phone;
```

finish the following function declaration:

```
void printAreaCode(Phone p) {  
  
    printf("%3d\n", _____);  
}
```

11. **True or False** (circle one), the name of a `struct` type, defined with `typedef`, can be used in variable declarations or formal parameter declarations, just like a built-in type (e.g., `int`) is used.

Video: Point

12. Handwrite code below that defines a `struct` type called **LineSegment** that represents a line segment, given that a line segment has two **end points**. (Hint: it is OK for a `struct` to contain fields that are themselves of some `struct` type.) Feel free to try your code in Eclipse before writing it down here.

13. After watching this set of videos, what questions, if any, do you have? If none, please write "None".