Student ID _____ **CSE 5A** **Name** _____

Quiz 4

Signature _____ **Fall 2006** **cs5f** ____

This quiz is to be taken **by yourself** with closed books, closed notes, no calculators.

1. Consider the following program. Identify the marked parts of the program with the corresponding letter from the list below.

A) Function Definition
B) C Preprocessor Directive
C) Internal Static Variable
D) Global Variable
E) (Formal) Parameter
F) External Static Variable
G) Function Prototype
H) Local Variable

```
#include <stdio.h>                                  ______

#define SIZE 5                                     ______

int function( int array[], int size );             ______ (entire line)

static long fellow;                                ______

int cling = 420;                                   ______

void
main( void )                                       ______
{                                          (main(){...})

    int array[SIZE] = { 1, 3, 5, 7, 9 };           ______

    int result;                                    ______

    /* Other code here */
}

int
function( int array[], int size )                  ______      ______      ______
{                                  (function(){...})   (array)     (size)

    static int cling;                              ______

    int result = 420;                              ______

    /* Other code here */
}
```

(continued on other side)

2. Consider the following structure definition and variable declarations.

```
struct Q4
{
    double a;
    int    b;
    double c;
    int    d[7];
    char   e;
};
```

```
/* var1, var2, and var3 are of type struct Q4 */

struct Q4 var1, var2, var3;
```

Fill in the blanks to complete the following tasks:

```
/* Print the value of the struct member e in var2 */

printf( "%____\n", _______________ );


/* Copy the value from the struct member c in var1 to the struct member a in var3 */

____________________ = ____________________ ;


/* Assign the value 420 to the last array element in the struct member d in var1 */

_____________________ = 420;
```

3. What gets printed?

```
#include <stdio.h>
#define SIZE 5

int doSomething( int array[], int size );

int
main( void )
{
    int array[SIZE] = { 1, 5, 3, 2, 6 };
    int result, i;

    result = doSomething( array, SIZE );

    printf( "%d\n", result );

    for ( i = 0; i < SIZE; ++i )
        printf( "%d\n", array[i]);

    return 0;
}

int
doSomething( int a[], int size )
{
    int i;
    int result = 0;

    for ( i = 0; i < size; ++i )
    {
        result = result + a[i];
        a[i] = result + a[i];
    }

    return result;
}
```