H13: Due Monday, 12.01 in Lecture

Review of Parameter Passing (Chapter 4, and Sections 5.1, 5.2)
Assigned: Mon 11.24   Total Points: 50

MAY ONLY BE TURNED IN IN THE LECTURE/LAB LISTED ABOVE AS THE DUE DATE,
or offered in person, for in person grading, during instructor or TAs office hours.
See the course syllabus at https://foo.cs.ucsb.edu/16wiki/index.php/F14:Syllabus for more details.

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(1) (10 pts) Fill in the information below. Also, fill in the A-Z header by

- **coloring in** the first letter of your first and last name (as it appears in Gauchospace),
- writing **either 9,10,11,12,1 or 2** to indicate your **discussion section (lab)** meeting time
- writing your **first and last initial** in large capital letters.

All of this helps us to manage the avalanche of paper that results from the daily homework.

name:	
umail address:	@umail.ucsb.edu

If you collaborated with AT MOST one other person on this homework, write his/her name below. She/he should also have your name on his/her paper.

2. (4 pts) Consider the program p01.cpp in the box at the right. Find the line of code that says `fun(&a);`. What is the meaning of the `&` symbol on this line? (Multiple choice:)

   a. C++ style pass by reference
   b. take the address of a
   c. logical and
   d. bitwise and

3. (8 pts) What is the output of the program p01.cpp in the box at right?

```cpp
#include <iostream>
using namespace std;

int main() {
  int a = 2;
  fun(&a);
  cout << "a=" << a << endl;
  return 0;
}

void fun(int *w) {
  (*w) = 7;
  cout << "(*w)=" << (*w) << endl;
}
```

3. (4 pts) Consider the program p02.cpp in the box at the right. Which of the following correctly describes the style of parameter passing used in this program?

   a. C++ style pass by reference
   b. pass by value
   c. simulated pass by reference using pointers
   d. passing an array to a function

4. (8 pts) What is the output of the program p02.cpp in the box at right?

```cpp
// p02.cpp
#include <iostream>
using namespace std;

void times(int y) {
   y = y * 9;
   cout << "y=" << y << endl;
}

int main() {
   int b = 7;
   times(b);
   cout << "b=" << b << endl;
   return 0;
}
```

5. (4 pts) Consider the program p03.cpp in the box at the right. Which of the following correctly describes the style of parameter passing used in this program?

   a. C++ style pass by reference
   b. pass by value
   c. simulated pass by reference using pointers
   d. passing an array to a function

6. (4 pts) What is the meaning of the & symbol in the line
`void phooey(int &z) {`
   a. C++ style pass by reference
   b. pass by value
   c. simulated pass by reference using pointers
   d. passing an array to a function

```cpp
// p03.cpp
#include <iostream>
using namespace std;

void phooey(int &z) {
   z = z / 2;
   cout << "z=" << z << endl;
}

int main() {
   int b = 3;
   phooey(b);
   cout << "b=" << b << endl;
   return 0;
}
```

7. (8 pts) What is the output of the program p03.cpp in the box at right?