

First name (color-in initial)	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	section (9,10,11, 12,1 or 2)	first name initial	last name initial
Last name (color-in initial)	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z			

## H08: Due Tuesday, 01.27 in Lab

### Review of Parameter Passing (Chapter 4, and Sections 5.1, 5.2)

Assigned: Tue 01.20

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/W15:Syllabus> for more details.

(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:	
email 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:)

- C++ style pass by reference
- take the address of a
- logical and
- bitwise and

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

```
#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?

```
// 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

```
// 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?