Quiz 8

5 December 2012

You have up to 25 minutes. You may use a calculator if necessary, but not computer, book, or notes.

1. The following program uses an array. What is the output?

```cpp
const int SIZE = 4;
int xs[SIZE] = { 3, 2, 4, 2 };
int z = 0;
for(int i = 0; i < SIZE; i++) {
    z += xs[i];
}
cout << z << "\n";
```

2. The following program passes an array to a function. What is the output?

```cpp
const int SIZE = 5;
void blargh(int a[SIZE], int i)
{
    i++;
    a[i]++;
}

int main()
{
    int b[SIZE] = { 0 };
    int i = 1;
    blargh(b, i);
    blargh(b, i);
    blargh(b, i);
    for(int i = 0; i < SIZE; i++) {
        cout << b[i] << "\n";
    }
}
```

3. The following program manipulates an array. What is the output?

```cpp
const int SIZE = 7;
int xs[SIZE] = { 4, 7, 2, 1, 8, 6, 5 };
for(int i = 1; i < SIZE; i++) {
    xs[i-1] += xs[i];
}
for(int i = 0; i < SIZE; i++) {
    cout << xs[i] << "\n";
}
```

4. The following function uses both a value parameter (`int i`) and a reference parameter (`int& j`). What is the output of the program?

```cpp
void blargh(int i, int& j)
{
    i++;
    j++;
    cout << i << "," << j << "\n";
}

int main()
{
    int i = 2, j = 5;
    blargh(i, j);
    cout << i << "," << j << "\n";
    blargh(j, i);
    cout << i << "," << j << "\n";
}
```