1. True or False

a) void functions return a value.

b) Function prototypes do not require parameter names.

c) Pass by reference will send the address of the variable, not the value of the variable.

2. What is printed?

```cpp
void myFunc(int x, int y) {
    x = 52;
    y = 7;
}

int main() {
    int x = 0;
    int y = 0;
    myFunc(x, y);
    cout << "x = " << x << endl;
    cout << "y = " << y << endl;
    return 0;
}
```

3. What is printed?

```cpp
int myFunction(double a, double b, double c) {
    a = 2 * b;
    b = 15 + c;
    c = 3 * a;
    return a + b + c;
}

int main() {
    double a = 1;
    double b = 2;
    double c = 3;
    myFunction(a, b, c);
    cout << "a = " << a << " b = " << b << " c = " << c << endl;
    return 0;
}
```
4. What is printed?

```cpp
int myFunction(double a, double b, double c) {
    a = 2 * b;
    b = 15 + c;
    c = 3 * a;
    return a + b + c;
}

int main() {
    double a = 1;
    double b = 2;
    double c = 3;
    double d = myFunction(a, b, c);
    cout << d << endl;
    return 0;
}
```

5. Which are legal statements?

- a) `cout << funcA(5, 4, 3) << endl;`
- b) `cout << funcB(5, 4.0) << endl;`
- c) `funcA(5, 4);`
- d) `funcA(5, 4.7, 3);`
- e) `int x = funcB(5, 6);`
- f) `int y = funcA(5, 4, 3);`

6. Write Function Prototypes

a) Write a function prototype with the name "coolFunc" that has no parameters and does not return a value.

b) Write a function prototype with the name "hotFunc" that has no parameters and returns a double.

c) Write a function prototype with the name "neutralFunc" that returns an integer and whose parameters in order are an integer named foo, a double named bar, and a character named baz.

7. Write a Function

- Write a function that calculates and returns the area of a square for whole numbers.
8. Find the errors

```c++
#include <iostream>
using namespace std;

int main() {  
    short y;  
    cout >> "7 plus one is " << y << endl;
    return 0;
}

void addOne( int x ) {  
    x++;  
}
```

9. Find the errors

```c++
#include <iostream>
using namespace std;

int main() {  
    fout ofstream;
    double x(2.0), y(2.5);
    if( x > y )  
        fout >> "x is greater than y" << endl;
    else  
        fout << "x is less than/equal to y" >> endl;
    return 0;
}
```

10. Write code

a) Write a snippet of code that
   i. declares and opens the file "FileIn.txt" for an
      input stream named "myInput"
   ii. Checks to be sure the open occurred and if
       not exits the program

b) Suppose FileIn.txt contains 3 integers. Write code to read in these three integers from the input stream and outputs the sum to the terminal

11. Write Code

• Write a function that accepts an integer array of any size and returns the sum of the array. Do not allow the function to modify the array.
12. Write code

• Write a function that has no return and accepts a string as input and appends to the end of the string " is a super coder."

```cpp
13. What's the output?

int someFunc(int a, int b) {
    if (a < b)
        return a + someFunc(b, a);
    else
        return b + someFunc(a - 1, b);
}

int main() {
    cout << someFunc(2, 3) << endl;
    return 0;
}
```

14. What's the output?

```cpp
int someFunc(int a, int b) {
    if (a < 0 && b < 0)
        return 0;
    else if (a < b)
        return a + someFunc(b, a - 1);
    else
        return b + someFunc(a - 1, b);
}

int main() {
    cout << someFunc(2, 3) << endl;
    return 0;
}
```