- 1) What does += do?
- 2) What does /= do?
- 3) What does this initializer do? int scores[12];
- 4) What does this initializer do? int buckets[] = {0, 1, 2, 3, 4};
- 5) and this do? int $arr[3][3] = \{ \{0, 3, 6\}, \{1, 4, 7\}, \{2, 5, 8\} \};$
- 6) Given question 5) what would be printed by this?

```
cout << arr[1][1] << endl;
and this? cout << arr[2][1] << endl;
and this? cout << arr[1][0] << endl;</pre>
```

- 7) What does this initializer do? int arr[3][3][3];
- 8) Given this function foo()

```
int foo(int x = 4, int y = 4, int z = 4, int w = 4)
{
    return (x + y + z + w);
}
```

What will this cout print?

```
cout << foo(1, 2) << endl;</pre>
```

What will print when this is called,

```
float fData = 8.88;
print(fData);
```

10) Given this enum

}

```
enum Season {Fall, Winter, Spring, Summer};
```

What will print when this is called? Remember, enumerated values are integer constants in disguise. The first in the list is 0, the next 1, and so on.

```
Season season = Winter;
cout << season << endl;</pre>
```

For 11), 12), and 13), when given this string

```
string str= "We are the world.";
```

11) What will print when this is called,

```
string str2 = str.substr(11, 5);
cout << str2 << endl;</pre>
```

12) What will print when this is called,

```
long pos = str.find("are");
cout << pos << endl;</pre>
```

13) Now, given pos from 12) what will print when this is called,

```
str = str.replace(pos, 3, "were");
cout << str << endl;</pre>
```

```
14) What does this function do?
int foobar(int num1, int num2)
    int num3 = num2 - num1 + 1;
    return rand()%num3 + num1;
}
15) Correct the program below so that main() has access to, and can print, RATE without the
compiler saying "Use of undeclared identifier 'RATE'"
#include <iostream>
using namespace std;
namespace globalType
{
    const int N = 10;
    const double RATE = 7.5;
    void printResult();
}
int main()
    cout << "RATE:" << RATE << endl;</pre>
    return 0;
}
16) Why is the use of a random seed such as srand((uint)time(NULL)); so important?
17) Where in your program would you typically use such a random seed?
```

```
18) What does this function do?
bool foo(int list1[], int list2[], int size)
    for (int i = 0; i < size; ++i)
        if (list1[i] != list2[i])
        {
             return false;
        }
    return true;
}
19) What does this function do?
int bar(int list[], int size, int value)
{
    for (int i = 0; i < size; ++i)
        if (list[i] == value)
        {
             return i;
    }
    return -1;
}
20) What does this function do?
void foobar(int& thing1, int& thing2)
    int bucket;
    bucket = thing1;
    thing1 = thing2;
    thing2 = bucket;
}
```