Answer the following questions. Each question will be graded from 0 - 4 and the overall score scaled to the maximum number of points. **Print only -- no cursive -- and use a pencil.**

1. How do you overload a function and what are the restrictions for overloading functions? Given the prototype `int fcn(int, int);` provide and label two prototypes for a properly overloaded function and two prototypes for an overloaded function that are invalid.

2. With respect to both the function prototype and the function implementation, how do you provide default function parameters? What are the restrictions for providing default function parameters? What are the restrictions for calling a function that has default function parameters?

3. What is the output of the code snippet below?

```cpp
int fcn(int &x)
{
    static int y = 3;
    x++;
    return --y;
}

int x = 0, y = 0;
cout << x << " " << y << " ";
cout << fcn(x) << " ";
cout << x << " " << y << " ";
cout << fcn(x) << " ";
cout << x << " " << y << " ";
cout << fcn(x) << endl;
```

**Raw score:** ____________________ /12

**Scaled score:** ____________________ /36