

CSCE 330 Fall 2011
QUIZ 9
Assigned Tuesday, 11-11-08

1. Find the error in the following function:

```
sum [] = 0
sum(x:xs) = x + sum x
```

Answer: x should be xs

2. Consider the following function:

```
product [] = 1
product (x:xs) = x * product xs
```

Show that $\text{product } [1,2,3] = 6$.

Answer: $\text{product } [1,2,3] = 1 * \text{product } [2,3] = 1 * 2 * \text{product } [3] = 1 * 2 * 3 * \text{product } [] = 1 * 2 * 3 * 1 =$ (several ways to finish).