

# CSCI 10 Midterm 2

## Functions

### syntax

#### declaration

Must be above first use

Return type (can be void)

Type of and name of parameters

Ended in a semicolon

#### definition

Can be below main

Actual code for what the function does

“Type signature” must match declaration

### Scope

#### Local variables

Only available in function

Destroyed when function returns

Only way to get data into function: parameters

To get data out of function:

return

Reference parameters

## Arrays

Have a fixed size, but they don't know their size

Use const variable to store size, and pass size to functions

Always act like pass by reference

No bounds checking

Valid index range is  $0, 1, \dots, sz-1$

## Variables

### Reference (&)

## Double loops

Box printing

Print the first ? primes

Factorials