## Mini Quiz 4 Topic List

Mini Quiz 4 covers material from **Labs 1-7**, with emphasis on newer material. The following is a summary of what you should know.

## **New topics:**

- while loops
  - o Checks condition at the beginning
  - o Example:

```
int n = 0;
while(n != 25)
{
   cout << "Please enter a number: ";
   cin >> n;
}
```

- do-while loops
  - o Checks condition at the end (will always run at least once)

```
do
{
cout << "Enter a number: ";
cin >> num;
}while (num != -1);
```

## **Topics from previous quizzes:**

- for loops
  - o Runs a pre-specified number of times
  - o Example that runs 6 times:

```
for(int n = 0; n < 6; n++)
{
    cout << "blah" << endl;
}</pre>
```

- Totaler variables
  - o Build off previous values (ex. total = total + i)
  - o Should be initialized (given a starting value, like 0)
- If-else structures
- Notation for conditional testing

```
o == equal?
o != not equal?
o >, <, >=, <=
o && and
o || or
```

- Variables Types and Operations
  - o Arithmetic operations: adding, subtracting, multiplying and dividing.
  - o Modulus (%)
  - o Careful of mixing types (i.e. integer division results in integer answer)
  - o Typecasting
- How to use cin and cout for input and output.
- How to format your output (e.g. putting some information on different lines)

You will complete the quiz <u>on paper</u> during class. You will not be allowed to use the computer or any other reference material.