CSE1502-O3 Fall 2008 Exam \#1.
Open book, open notes, no computers.
What do each of the following print? (5 points each)
ANSWERS

```
cout << 3 / 2 - 0.1;
cout << 4 - 1 + 0.5;
cout << -12 % 5;
int a = 5, b = 10;
cout << ++a * b--;
```

int $\mathrm{a}=5, \mathrm{~b}=10$;
while ( a ! = b)
cout << ++a << " ";
for (int i $=5$; $i<10 ;++i$ )
cout << i << " ";
int $\mathrm{a}=5, \mathrm{~b}=10$;
if $(a=b)$
cout << a;
else
cout << a * b;
int $a=5 ;$
do
\{
cout << a;
a += 2;
\} while ( $\mathrm{a}<0$ );
for (int $i=1$; true; i $+=$ i)
\{
if (i == 32)
break;
cout << i << " ";
\}

```
```

int a = 5, b = 10;

```
```

int a = 5, b = 10;
if (a == 4);
if (a == 4);
cout << a << " ";
cout << a << " ";
cout << b << " ";
cout << b << " ";
cout << "a";

```
cout << "a";
```

```
    cout << a << " "; 5 10 a
```

```
    cout << a << " "; 5 10 a
```

0.9
3.5
-2

60

678910

10
56789
else
cout << a * b;
int $a=5 ;$
do
\{
cout << a;
5
\} while ( $\mathrm{a}<0$ );
for (int $i=1 ;$ true; $i+=i)$
\{
if (i == 32)
break;
cout << i << " "; \}
.

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10 a
/ / ANSWER
\#include <iostream>
using namespace std;
int main()
\{
double sum $=0, x$;
int count $=0$;
while (cin >> x)
\{
sum $+=x$;
++count;
\}
cout << "The average is "
<< sum / count << endl;
return 0;
\}

Name $\qquad$
Write a program that reads a list of numbers (type double) and prints their average. Assume that the input contains numbers separated by spaces and that the list ends either with an end of file (Ctrl-Z if reading from the keyboard) or any input that is not a valid number. The input list can be any length, 1 number or longer. For example (user input in bold) ( 50 points):
$52.5-0.9 \mathrm{x}$
The average is 2.2
$\begin{array}{llllll}0 & 1 & 2 & 3 & 5\end{array}$ ^z
The average is 2.5
// ANSWER
\#include <iostream>
using namespace std;
int main()
\{
double sum $=0, x$;
int count $=0$;
while (cin >> x)
\{ sum $+=x$; ++count;
\}
cout << "The average is "
<< sum / count << endl;
return 0 ;
\}

