Unit 1 – Worksheet 02 Name: _____

Compound Operators and Rounding

1. Which of the following code segments would properly round the number 3.7 to the nearest whole number?

   I. (int)3.7;
   II. (int)3.7*10;
   III. (int)(3.7+0.5);

   A. I only
   B. II only
   C. III only
   D. I and III
   E. II and III

2. What is the exact output for the following code excerpt?

```
int cat=2, dog=5, fish=10;
cat+=dog;
dog-=fish;
fish*=cat+dog;
System.out.print(fish);
```

3. What is the exact output for the following code excerpt?

```
int one=5, two=9, three=15, four=3;
three%=two;
three/=four;
one++;
System.out.print(three+one);
```

4. What is the exact output for the following code excerpt?

```
double a=2.5, b=12, c=8;
double z = b/c;
System.out.print(a+b+c+z);
```

5. What would the following problems evaluate to?

   a. *(double)(5/10)*
   b. *(int)(17%3*1.6)*
   c. *(int)(100*5.36891+0.5)*
   d. *(double)(2+3+4+5+6)/5*
   e. *(double)(10/4+2)*
   f. *10+13*2/3%5*

6. What is the exact output for the following code?

   System.out.print("\\this is really close to a comment but\\ NOT\"");

7. If the order of operations were reversed (addition/subtraction came before multiplication/division), what would 5 - 2 * 7 / 2 + 8 – 1 evaluate to?

8. In Netbeans create a class called ***myExamAverages***. Use the following code and be sure to add proper code where asked. **Note**: you must use the variable names, round using the "+0.5" method, and output:

```
int ex1=86, ex2=77, ex3=88;
int ex4=71, ex5=92, ex6=88;

                                    //add code to average the exams and store in a proper variable

System.out.print("Avg rounded to nearest percent:  ");

                                    //add code that rounds the average & outputs correctly: 84

System.out.print("\nAvg rounded to one decimal place:  ");

                                    //add code that rounds the average & outputs correctly: 83.7

System.out.print("\nAvg rounded to two decimal places:  ");

                                    //add code that rounds the average & outputs correctly: 83.67

                                    //When done, run your program and make sure the output is:
                                        Avg rounded to nearest percent:  84
                                        Avg rounded to one decimal place:  83.7
                                        Avg rounded to two decimal places:  83.67
```