Name/PID: Alex Vano

Turn this sheet to your lab instructor at the end of the lab for grading.

Step 2:

Answer the following 5 questions by <u>manually</u> tracing the nine functions given in lab sheet.

1. (10 pts.) For the <u>first cout</u> statement, which **sum** is called?

//First sum
int sum(int x, int y);

2. (10 pts.) For the **second cout** statement, which **sum** is called? //Second sum double sum(int x, double y);

3. (10 pts.) For the <u>third cout</u> statement, which functions are called? In this case, <u>give</u> the order that the functions are called as well.

//Fourth sum
int sum(int x, int y, int z);
// Sixth sum
int sum(int a, int b, int c, int d)

4. (10 pts.) For the **fourth cout** statement, which functions are called? In this case, **give** the order that the functions are called as well.

// Eighth sum

double sum(int a, double b, int c, double d, int e, double f);

// Ninth sum

double sum(double a, double b, double c, double d, double e, double f);

5. (10 pts.) For the <u>fifth cout</u> statement, which functions are called? <u>In this case, give</u> the order that the functions are called as well.

// Ninth sum
double sum(double a, double b, double c, double d, double e, double f);
// Eighth sum
double sum(int a, double b, int c, double d, int e, double f);

Step 3: For questions 6-9, make the changes and compile and run the program.

6. (10 pts) Explain what happens if you remove the <u>s</u> sign from the getNum function declaration (prototype) and the function heading. Don't forget to put the <u>s</u> back before moving on to the next question.

You receive a runtime error as just the variable 'num' is not defined, it is &num that is

7. (10 pts) Similarly **explain** what happens if you remove the **&** from **findMin** function declaration and the function heading. **Don't forget to put the & back before moving on to the next question.**

You receive the same error where the reference is not defined.

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8. (10 pts) Explain what happens if you change the order of *actual arguments* in the function call

```
findMin(minimum, number);
```

to

findMin(number, minimum);

The min number always will print out as the first number you input

9. (10 pts) Explain what happens if you **remove the call** to the function **getNum(number)**; Comment (//) this statement out and run the program to find out the outcome. Make sure that you remove the // before moving on to the next question (b)

You get an error saying 'number' is uninitialized

9a. **Before** the while loop.

With getNum still having // it does not work still, otherwise the function works

9b. **Inside** the while loop

The function still works

10. (10 pts) Identify and write the names of <u>value and/or reference</u> parameters in the following functions. Write the word **none** if there are no value/reference parameters.

	getNum	findMin
value parameters:	none	curNum
reference parameters:	#	&curMin