

MATH 1310 Programming Project #1

You have the whole class period to work on the project with your group. Write your answers on a separate paper. You are required to use your own calculator and turn in your own paper. Be sure to answer all of the questions asked.

<u>Location</u>	<u>Command</u>
PRGM > I/O	Disp
PRGM > I/O	Prompt
GRAPH > DRAW	CIDrw
GRAPH > DRAW	DrawF
GRAPH > VARS	FnOff
STO	→
x-VAR	x

1. Enter the following program on your calculator and run it several times with different inputs. What exactly does this program do? Be specific. What do the commands Prompt and DrawF do? You may consult your calculator's manual if you wish. Note: the first two lines are there to prepare the calculator for graphing. We wish to find out more about these commands later.

```
: CIDrw
: FnOff
: Prompt M
: Prompt B
: DrawF M*x+B
```

2. Enter the program below into your calculator. Write down what you see on your calculator when you run the program. Try running it a few times with different inputs. Now explain what each line of the program does.

```
: Prompt A
: Prompt B
: A → B
: Disp A
: Disp B
```

3. Replace line 3 (: A → B) in the above program with each of the following command(s). Write down what you see on your calculator after running the program each time. Try to explain what you see.

- (a) : B → A
- (b) : A + B → B
- (c) : B → A + B
- (d) : A + B → B
: A + B → B

4. Write a program to do the following: Prompt the user for the x and y -coordinates of two points; calculate and display the slope and y -intercept of the line which passes through the two points. Write your program down on the paper you are turning in. Be sure to test it to make sure it works!
5. Modify the program you wrote in part 4 so that it graphs the line instead of displaying the slope and y -intercept. Write down this version on your paper also.