Most of these programs are self explanatory but this is just a little help file to help with the ones that aren't exactly self explanatory. All my programs will have a little splash screen saying what the program is and my name, but all you have to do is press enter to continue to the program. At the end of each program, simply press enter to return to the home screen.

Series
Finds the sum of all numbers in a sequence.

First you choose weather the sequence is an arithmetic series, or a geometric series.

Then you choose whether you were given the 2nd term or the common difference/ratio and then if you were given the length or the last number in the sequence. The program will then request the input off the variables you selected and after a second, will display the sum off all the numbers in the series.
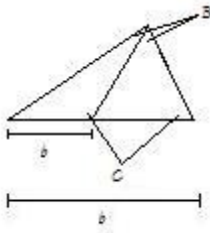
Quadratic
If I have to explain this, you shouldn't be in Trig

Simply input A, B, and C as you would in a standard quadratic equation solver. This program will take slightly longer to work than a normal quadratic equation because it has to simplify the radical. This program will display simplified radial equations, including an I if it is needed in the answer as shown below. The inputs were 1,1, 129/4 and the output is below. This shows the ability to simplify fractions and simplify radicals, even simplifying a negative radical to be i.

Ambig Case
Finds the length of line b, angle B and angle C

Angle is the angle to the left of the above diagram. Adjacent is the unlabeled side next to the angle. Opposite is the side opposite the angle.

```
OPPOS 15
Bθ
    {132.87 7.13}
B
     {32.14 5.44}
Cθ
   {27.13 152.87}
■
```

This is what your calculator will display for the Ambig Case program. Enjoy

Binomial Expan
Expands a binomial in the form of $(AX^B+CY^D)^E$ where A,B,C,D, and E are constants.

Input A,B,C,D,E respectively and then choose what term you want to display. If you choose to display a single term, the first number that comesD up is the integer at the beginning of the term. The second numbers is the integer over the first variable. The third term is the exponent over the second variable. If you choose to display all the terms, it works the same but it only shows 1 term at a time. Simply press enter to move to the next term.

Linear Variation
Solves those annoying "varies linearly with" problems.

Input the X and Y of the first 2 equations and the X of the third equation and it will display the Y. Not a very complicated program but very useful.

3X3 System
Solves an equation with three variables and three unknowns

This program will display two answers. The first answer is the determinant of the variables, the last number in this list being the denominator determinant. If you haven't learned what that means, your teacher won't expect you to use it. The second list that will be displayed is the answer in the order of X,Y,Z.

Dis Pnt Lin
Find the distance from a point to a line

The first thing this program asks for is the location of the point. For example if the point was at (1,4), you must input it exactly as "{1,4}" The M is the slope of the line, B is the y intercept.