

Documentation for QPrograms

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1. Contact Details:

I will not be able to respond to any questions about this package. I am a year 12 student in 2002 doing SIX TEE subjects, so my time is short as it is!

2. Legal Information:

All files in the QPrograms kit are copyright (c), 2002 by M. Grosvenor.

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Permission to copy the whole, unmodified QPrograms package is granted provided that the copies are not made or distributed for resale (excepting nominal copying fees) and that this document is included without modification of any kind.

It *should* be impossible to crash your calculator by using QPrograms, but be warned: no software is bug free!

3. Installing QPrograms

It is quite easy to install the package. Here is a step by step method that will ensure it works properly:

1. Unzip the QPrograms zip file to any suitable location.
2. Fire up the HPCom software and point it too that location.
3. On your calculator go into the APLET view and push RECV.
4. Select "Disk drive..." and push OK.
5. A Menu displaying the option "QPrograms" and "Other" will appear. Highlight QPrograms.
6. Press OK and the download will be completed automatically.



4. Using QPrograms:

QPrograms is a selection of useful programs bound into a single applet that designed to be added to with others. The programs include in this edition are:

1. A term generator for binomial theorem calculations
2. A mean calculator to determine means of groups of data.
3. A standard deviation calculator to determine SDevs of groups of data
4. A complex number divider that gives answers in exact, un-simplified format.

Using QPrograms Applet:

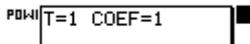
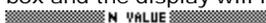
The QPrograms applet binds together all of the programs into one. When you start it, a display showing this will appear:

These are the available programs. Select one to run it.



Using Bi Combination:

Bi Combination produces terms for binomial expansions of the form $(a+b)^n$. To use it, enter N in the input box and the display will look something like:



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This is the coefficient for the first term. By pressing OK all other coefficients will be displayed.

Using Group Mean:

This program works out the mean from two groups of data. To use it you will need:

1. The mean of Group 1
2. The number in Group 1
3. The mean of Group 2
4. The number in Group 2

When run, the program asks for the inputs as per the previous list. Simply enter each one and the total mean will be displayed.

Using Group Standard Deviation:

This program works out the standard deviation from two groups of data. To use it you will need:

1. The standard deviation from Group 1
2. The mean from Group 1
3. The number in Group 1
4. The standard deviation from Group 2
5. The mean from Group 2
6. The number in Group 2

When run, the program asks for the inputs as per the previous list. Simply enter each one and the total standard deviation will be displayed.

Using Complex Divisions:

This program performs complex divisions in exact form

When run, it asks for Z1 and Z2:

The calculation is performed as follows:

$$Z1 \div Z2 = \frac{Z1 \times \overline{Z2}}{Z2 \times \overline{Z2}}$$

The calculation is performed as follows The first result is the top line (Z1 x CONJ(Z2)) and the second result is the bottom line (Z2 x CONJ(Z2)).

THIS PERFORMS NO SIMPLIFICATION YOU WILL HAVE TO DO THAT YOURSELF!

OTHER PROGRAMS INCLUDED AND HOW TO USE:

ONLY USE THESE IF YOU HAVE BACKUPS, AND YOU ARE CONFIDENT PROGRAMMING THE HP.

A number of other programs are included:

1. PGM-SET: This is the setviews of the aplet so that more programs can be added.
2. PGM-Nset: This contains the format for PGM-SET to make editing the setviews quicker.
3. PGM-Npgm: This contains the format to add new programs to the PGM program in below the last IF A=N RUN"x"; END: section. Also, a "<program name>"; will need to be added to the CHOOSE section.