

# A level Maths Applied Calculator Functions

## Year 1

### Measures of Location and Spread

- Calculating Mean, SD and Quartiles etc. from Cumulative Frequency Tables

1. Press MENU
2. Press 6 (statistics)
3. Press 1 (1-variable)
4. Enter x values (midpoint if range of values) and Frequency
5. Press AC
6. Press OPTN
7. Press 2 (1- Variable Calc)
8. All the data is presented

### Statistical Distribution

- Binomial distribution ( $X =$ )

1. Press MENU
2. Press 7 (Distribution)
3. Press 4- Binomial PD
4. Press 2- Variable
5. Put in all values

- Binomial distribution ( $X <$ )

1. Press MENU
2. Press 7 (Distribution)
3. Go down and press 1- Binomial CD
4. Press 2- Variable
5. Put in all values
6. If you want to calculate  $>$ , calculate  $<$  and then do 1-ANS.

### Hypothesis Testing

- Finding critical regions for one tailed and two tailed tests ( $X <$  OR  $>$ )

1. Press MENU
2. Press 7 (Distribution)
3. Go down and press 1- Binomial CD
4. Press 2- Variable
5. Put in all values (significance level is half when two tailed test)
6. If you want to calculate  $>$ , calculate  $<$  and then do 1-ANS.

- Finding exact probabilities ( $X =$ )

1. Press MENU
2. Press 7 (Distribution)
3. Press 4- Binomial PD
4. Press 2- Variable
5. Put in all values

## Year 2

### Correlation

- Calculating regression value
  1. Press Setup (Shift and Menu)
  2. Go down and press 3 (Statistics)
  3. Press 2 (OFF)
  4. Go to MENU
  5. Press 6 (Statistics)
  6. Press 2 ( $y=a+bx$ )
  7. Input x and y values
  8. Press AC
  9. Press OPTN
  10. Select 3 (Regression Calc)
  11. Values presented

### The Normal Distribution

- Normal distribution ( $X <$ )
  1. Press MENU
  2. Press 7 (Distribution)
  3. Press 1- Normal CD
  4. Put in bounds (put lower bound as -1000 and upper bound as 1000 if value not given)
  5. Put in mean and SD values
  6. Press =
- Normal distribution ( $X =$ )
  1. Press MENU
  2. Press 7 (Distribution)
  3. Press 2- Normal PD
  4. Put in all values
  5. Press =
- Inverse Normal Distribution (to find  $X < a$ )
  1. Press MENU
  2. Press 7 (Distribution)
  3. Press 3 – Inverse Normal
  4. Put in values (area is  $X < a = y$ )
  5. Press =