## Statistics Applications for TI-30x IIs Calculator Revised 4/03/2017

## Chapter 2 and 3:



## Clear Previous Data

Press 2: STAT / DATA
You will see 1-VAR 2-VAR

Press
right arrow key twice to see:
CLLRDATA,
Press ENTER to clear all existing data

## Descriptive Statistics for one set of Raw Data

Press 2: STAT / DATA
You will see 1-VAR 2-VAR

## Press ENTER

## Press DATA

You will see $\mathrm{X} 1=\quad$ Assume you want to enter (10,12,13, 20,18)
Input your first number - 10

Press the down arrow


You will see $F R G=1$

Press the down arrow


You will see X2 =
Follow this process until all numbers are entered

Once all data is entered. Press STATVAR
$\begin{array}{lllll}\text { You will see } \quad \underline{\mathrm{n}}, & \bar{x} \quad S x & \sigma x \\ & & & 5\end{array}$

Press the right arrow to advance to each value $\quad$| $n=5$ |
| :--- |
|  |
| $\bar{x}=14.6$ |
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## To get the variance

Press the right arrow
 to advance to the $\mathbf{S x}$ location then hit $\boldsymbol{x} \mathbf{2}$ then ENTER. The value of the sample variance 17.8 appears in the display

# Summary Statistics for one set of Raw Data using Frequency Distribution 

## Press 2: STAT / DATA

## You will see 1-VAR 2-VAR

## Press

 right arrow key twice to see: CLLRDATA,Press ENTER to clear all existing data

## Press 2: STAT / DATA

You will see 1-VAR 2-VAR

## Press DATA

You will see X1 = Assume you want to enter data from this table

Input your first number - 10

| Midpoint | Frequency |
| ---: | ---: |
| 10 | 3 |
| 13 | 2 |
| 16 | 5 |
| 19 | 3 |
| 22 | 6 |
| 25 | 4 |

Press the down arrow


You will see $F R G=1$ Press 3 to change frequency

Press the down arrow


You will see X2 = Follow this process until all numbers are entered

Once all data is entered. Press STATVAR
You will see
$\underline{n}, \bar{x} \quad S x \quad \sigma x$

23
to advance to each value
$\mathrm{n}=23$
$\bar{x}=18.47826087$
$S x=5.007898899$
$\sigma x=4.897821740$
$\sum x=425$
$\sum x^{2}=8405$

## Chapter 4:

## Counting Methods

## 1. Factorial n!

| Find the value of 5! |  |  |
| :--- | :--- | :--- |
| First enter " n ", then select PRB $\quad \mathrm{n}=5$ |  |  |
| Press the right arrow | nPr nCr |  |
| Hit ENTER 5 ! appears | $5!$ | 120 |
| Hit ENTER again and the answer 120 appears | 5 |  |

## 2. Permutations nPr

| If a president, vice president are to be selected from 5 committee <br> members, how many permutations can be selected. In this <br> example order is important so we use Permutations ${ }_{n} P_{r}={ }_{5} P_{2}$ |  |  |
| :--- | :--- | :--- |
| n=5 |  |  |
| First enter "n", then select PRB | nCr | $!$ |
| Press the right arrow | to advance to $n P r$ and hit ENTER |  |
| Press 2 and hit ENTER again and the answer 20 appears | ${ }_{5} P_{2}$ | ANS 20 |

## 3 Combinations nCr:

| If 3 committee members are select from 5 employees how many |  |  |
| :--- | :--- | :--- |
| combinations can be selected. In this example order is not |  |  |
| important so we use Combinations $={ }_{n} C_{r}={ }_{5} C_{3}$ |  |  |
| n $=5$ | $\mathrm{nPr} \operatorname{nCr}$ | $\vdots$ |
| First enter "n", then select PRB |  |  |
| Press the right arrow | to advance to $n \mathbf{C r}$ and hit ENTER |  |
| Press3 and hit ENTER again and the answer 20 appears | ${ }_{5} C_{3}$ | ANS 10 |

