## Calculator Exercises

Calculators are good to do the following:
(1) Perform Calculations
(2) Graphing Functions
(3) Problem Solving

Calculator Keys
$Y=$ RANGE ZOOM TRACE GRAPH
Perform Calculations
(1a) Calculate $2^{4}-4^{2}$
Solution: Using Calculator: Press $\begin{array}{llllllll}2 & 4 & - & 4 & \boxed{\sim} & 2 & \text { ENTER }\end{array}$
What did you get?
(1b) Calculate $3^{4}-9^{2}$

(1c) Calculate $2^{5}-4^{2}$

Solution: Using Calculator: Press | 2 |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | 5 | - | 4 | $\boxed{\sim}$ | 2 |
| ENTER |  |  |  |  |  | Press MODE Key. You should see something like this

| Norm | Sci Eng |
| :--- | :--- |
| Float | 0123456789 |
| Rad | Deg |
| Function | Param |
| Connected | Dot |
| Sequence | Simul |
| Grid Off | Grid On |
| Rect | Polar |

The keys 0123456789 you select will display to how many decimal places you want the solution to be.

Press RANGE key You should see something like

| RANGE |
| :--- |
| $X \min =-10$ |
| $X \max =10$ |
| $X \operatorname{scl}=1$ |
| $Y \min =-10$ |
| $Y \max =10$ |
| $Y \operatorname{scl}=1$ |
| $X \mathrm{res}=1$ |

If the values are different please put these.
Graph the following functions:

$$
\begin{aligned}
& Y_{1}=X \\
& Y_{2}=X^{2} \\
& Y_{3}=(X-3)^{2}-3 \\
& Y 4=X^{4}+3 X^{3}-2 X^{2}+2 X+1 \\
& \hline
\end{aligned}
$$

How do you enter the $X$ and $X^{4}$ in the expressions. You press the $\mathrm{X} \mid \mathrm{T}$ for the $X$ and $X \triangleleft \boxed{4}$ for $X^{4}$

