



To Find Intersection Pts:

1. Graph both equations.
2. Use CALC menu (2nd TRACE)
Choose #5 Intersect
3. Move near the intersect location.
4. Simply press <ENTER> 3 times to reveal the answer.

If you are looking for more than one intersection point, repeat this process.

Logs and Exponents:

1. The LOG key is log base 10.
2. To enter: $\log_4 64$ use $\frac{\log 64}{\log 4}$
3. $27^{\frac{1}{3}}$ is $27^{(1/3)}$ remember ()

Check Inverse:

Enter your algebraic inverse in Y1.
Graph. Use DRAW #8DrawInv to verify it is correct.

To see $\sqrt{-25} = 5i$, use $a + bi$ mode.

Summations:

$\sum_{k=1}^7 (2k+2)$
Enter sum(seq(2x+2, x, 2, 7, 1))

- 2nd STAT(LIST) – MATH - #5 sum
 - 2nd STAT(LIST) – OPS - #5 seq
- The format for seq: *expression, variable, starting value, ending value, increment.*

Calculator ID #:

Choose 2nd MEM,
#1 About
ID****_****_****

To Get Statistical Information:

1. Place data in Lists: STAT → EDIT
2. Engage 1-Variable Statistics: STAT → CALC #1 1-VAR STATS
3. On Home Screen indicate list containing the data: 1-VAR STATS L₁

\bar{x} = mean	Q ₁ = data at the first quartile
S _x = the sample standard deviation	med = data at the median (second quartile)
σ_x = the population standard deviation	Q ₃ = data at the third quartile
n = the sample size (# of pieces of data)	

Diagnostics ON: must be ON to see correlation coefficient, r.
1. MODE – StatDiagnostics: ON
or 2. CATALOG, ALPHA D, DiagnosticOn, ENTER, ENTER

Functions:

$Y_1 = f(x)$ and $Y_2 = g(x)$
 $(f + g)(x) \rightarrow Y_3 = Y_1 + Y_2$
 $(f - g)(x) \rightarrow Y_3 = Y_1 - Y_2$
 $(f \cdot g)(x) \rightarrow Y_3 = Y_1 Y_2$
 $(f / g)(x) \rightarrow Y_3 = Y_1 / Y_2$
 Composition:
 $(f \circ g)(x) \rightarrow Y_3 = Y_1(Y_2)$

To Get Scatter Plots and Regressions

- (Linear, Quadratic, Exponential, Power, etc):
1. Place data in Lists: STAT → EDIT
 2. Graph scatter plot: STAT PLOT #1 <ENTER> Choose ON.
Choose the symbol for scatter plot, choose L₁, L₂, choose mark
 3. To graph, choose: ZOOM #9
 4. To get regression equation: STAT → CALC #4 Lin Reg(ax+b)
(or whichever regression is needed)
 5. On Home Screen: LinReg(ax+b) L₁, L₂, Y₁
 6. to see graph – GRAPH

To get Y₁ to appear:
VARS → Y-VARS Choose
FUNCTION, Y₁
OR ALPHA F4

Normal Distributions DISTR(2nd VARS)

1. normalcdf (lower, upper, mean, s.d.) *Finds prob. on cumulative interval.*
• to enter ∞, use 10⁹⁹ or 1 EE 99.
2. normalpdf(x, mean, s.d.) *Graphs the normal distribution.*
• Window: Xmin = mean – 3 s.d.; Xmax = mean + 3 s.d.; Xscl = s.d.
Ymin = 0; Ymax = 1/(2 s.d.); Yscl = 0
3. ShadeNorm(lower, upper, mean, s.d.) *To see area and % under curve.*
• must graph using normalpdf first, or you won't see your shading.