

Name: _____

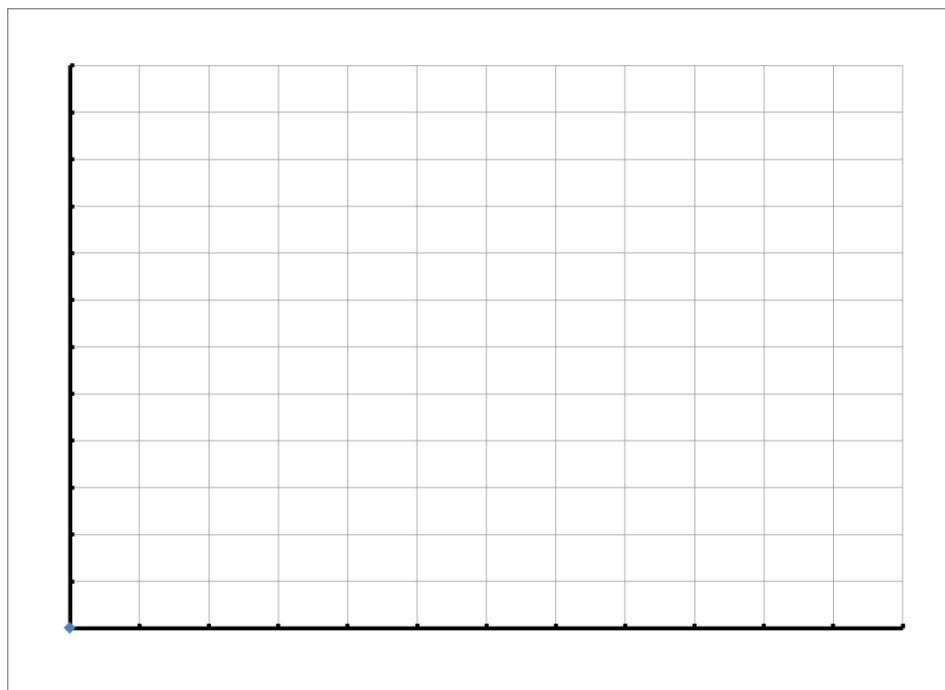
UNIT B - GRAPHING INVESTMENTS ON TI-83 (2nd Practice)

Karen wants to invest **\$2,500** for some length of time. She can do a Simple Interest account at 12% **or** a Compound Interest account compounded *monthly* at 12%. Graph the possibilities for the next **15** years.

How to graph. **Complete the table** below for each year for each type of investment.

Year; t	Simple Amount ; A $A = 2500*(1+0.12*t)$	Compound Amount; A $A = 2500 * \left(1 + \frac{0.12}{12}\right)^{t*12}$
0	2500	2500
1	2800	2817.06 (2800 is close enough to graph)
2		
3	etc	etc
5		
10		
15		

Plot the points! Years of time along the bottom, \$ value along the vertical side. 'Scale' it first. **Easy!!**



OR !

BETTER YET. Use a graphing tool! The one on the TI-83 is good. There are another dozen Apps on your phone or other device too that graph.

X and Y VARIABLES. Graphing tools only understand Y and X, not A and t, etc. So everything is Y and X. The **X** is on the X,T,θ,n button.

Press **Y=** graphing button

Enter: $Y_1 = 2500(1 + 0.12 \cdot X)$

and on next line:

$Y_2 = 2500 (1 + 0.12/ 12)^{(X \cdot 12)}$

Press: **GRAPH** ;can't see it????..

Select : **ZOOM** 0:Fit

Adjust the **Window** to show→

Press **GRAPH**

Follow along with the **TRACE** function if you want!

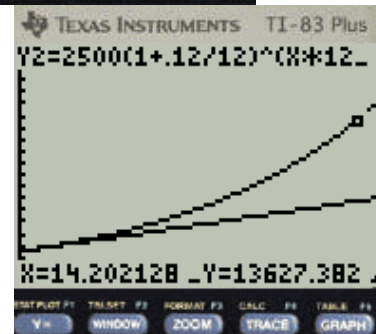
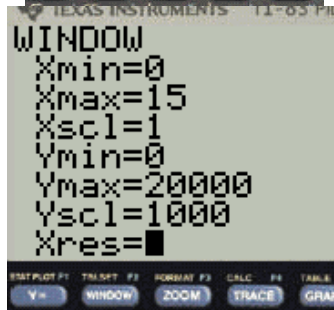
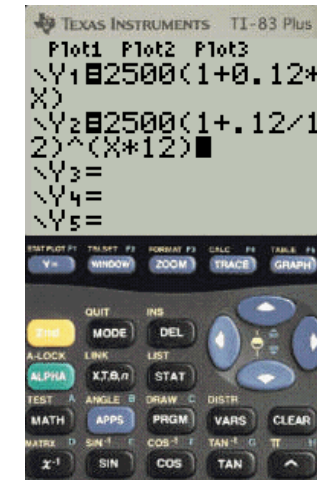
Move around with the Mouse Pad!

Explore! Have fun! Try another App! They are all similar!

Hey! More fun?

Select the **TABLE** function too
[2nd **GRAPH**] See what that does!?

OMG. Have fun!



X	Y ₁	Y ₂
0	2500	2500
1	2800	2817.1
2	3100	3174.3
3	3400	3576.9
4	3700	4030.6
5	4000	4541.7
6	4300	5117.7

X=0