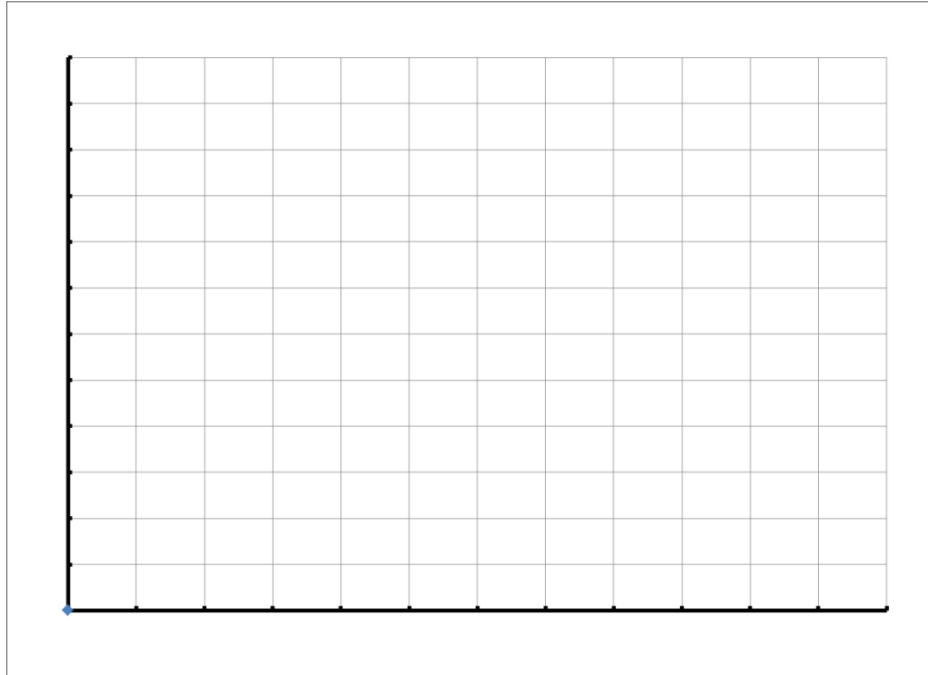## UNIT B - GRAPHING INVESTMENTS ON TI-83

Joan wants to invest **$1,000** for some length of time.   She can do a simple interest account at **7% or** a compound interest account compounded monthly at **7%**. Graph the possibilities for the next 10 years.

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

Year; t	Simple Amount ; A A = 1000*(1 + 0.07*t)	Compound Amount; A $A = 1000 * \left(1 + \dfrac{0.07}{12}\right)^{t*12}$
0	1000	1000
1	1070	1072.29 (just call it 1072 or 1100)
2	1140	1149.91 (just call it 1150 or 1200)
3	1210	etc
4	etc	
5		
6		
7		
8		
9		
10		

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

<p style="text-align:center;">**OR !**</p>

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 = 1000(1 + 0.07*X)

and on next line:

Y_2 = 1000 (1 + 0.07/ 12)^(X*12)

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

Select : **ZOOM** 0:Fit

Adjust the **Window** to show→
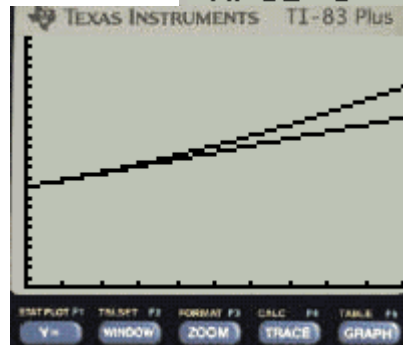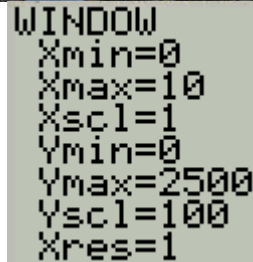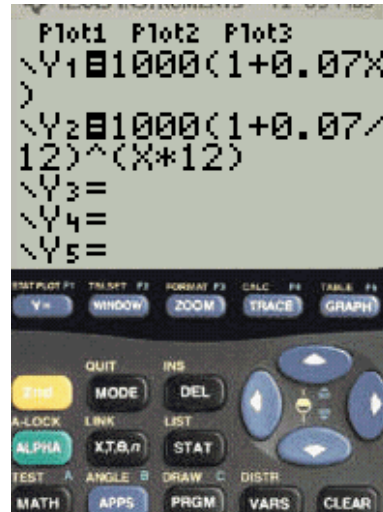
Press **GRAPH**

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!

<p style="text-align:center;">**OMG**.</p>

Have fun!