• Using a HP10Bii

## Setup

- 1. Press (1,orange button,PMT)
- 2. Verify setup by pressing orange button, then C button. Your screen should say 1 P\_Yr (If not, redo step 1)
- 3. Make sure calc is in BEGIN Mode (shows on the screen) if not, Press orange button and then the MAR(Beg/End) button.

## **Input Rules**

Investing	Loans / Retirement
+ N	+ N
+ I/YR	+ I/YR
+ PV	+ PV
+ PMT	- PMT
- FV	- FV



Determine what the question is whether you inputting info on the investing or loans side and do everything in years. (ex. Investing 100/mo change to 1200 PMT). Do EVERYTHING either in years or in months.

Don't forget to put the little neg sign

(just above the purple button) in front of your number before hitting the FV or PMT button.

This is the simplest way for input and the answer will be right! Don't ask about *WHY does the FV have a negative sign in front of it, IT JUST DOES!* 

## Calculator Drill for Skill – Questions

• Both annual and monthly calculation answers will be on answer key

1. Make \$68,000 today, with 3% Inflation, what will you need to make in 32 years to keep the same standard of living?

2. If something is \$40,000 today, If inflation was 4.2%, what would you have paid for that item 25 years ago?

3. \$16,000 growing at 6% for the next 40 years =?

4. \$24,000 Now. Add \$200/mo @ 10% Growth your value in 27 years would be?

5. \$32,000 Loan @ 6.7% for 8 years. What is the monthly payment?

6. \$41,000 Loan, paying \$290 /mo @5%. How long until loan is paid off?

\$28,000 RRSP Loan @ 10% growth, in 8 years what would the value be if this individual was in a 30% tax bracket and added the tax refund into the account?

8. \$50,000 Loan @ 2.5%. Individual has paid \$460/mo for 58 months. How much of the loan has been paid off? \_\_\_\_\_\_ and how much is left owing?

9. If you need \$1,800,000 for retirement in 28 years and you have \$11,000 now. How much will you need to invest monthly to reach FIN# ? @4% \_\_\_\_\_\_ @ 8%

10. Grandparents have \$280,000 saved.

- Scenario A Money is growing at 4%. They draw out \$1600 month. How long will the money last? (a) Draw out 1,000/mo (b)
- Scenario B Money grows at 9% and they draw out \$2,000 month. How long will money last? (c)
- Grows at 9%, Drawing out \$1500 /mo how much would they have in 10 years ?
   (d) in 15yrs?(e)
- Scenario C Client has \$200,000. Draws out \$1,800/mo. Money will last for 17 years. What was the annual growth percentage wise on this account?
   (f)\_\_\_\_\_\_

A. will be answer according to shown input. B. will be the alternate number

<b>Investing Questions</b>	Loan/Retirement Questions
1. 32 N, 3 I/Yr, 68000 PV, 0 PMT, FV a175,105 b177,382	5. 8 N, 6.7 I/Yr, 32000 PV, 0 FV, PMT a. 413.69 b. 429.12
<ol> <li>25 N, - 4 I/Yr, 40000 PV, 0 PMT, FV</li> <li>a. 13,683</li> <li>b. 13,971</li> <li>40 N, 6 I/Yr, 16000 PV, 2400 PMT, FV</li> </ol>	6. (5/12)= I/Yr, 41000 PV, 0 FV, -290 PMT, N a. 202.50 b. 212.46 8. 58 N, (2.5/12)= I/Yr, 50000 PV, -460 PMT, FV
a. 164,571 b. 175,319 4. 27 N, 10 I/Yr, 24000 PV, 2400 PMT, FV a. 634,343	<ul> <li>a. 21,971.80</li> <li>b. 28,028.20</li> <li>10. (4/12)= I/Yr, 28000 PV, -1600 PMT, 0 FV, N</li> <li>a. 261.68 months</li> </ul>
b. 685,023 7. 8 N, 10 I/Yr, 36400 PV, 0 PMT, FV a. 78,026 b. 80,741	(4/12)= I/Yr, 28000 PV, -1000 PMT, 0 FV, N b. 800 (9/12)= I/Yr, 28000 PV, -1500 PMT, 0 FV, N c. ERROR (right answer)
<ul> <li>9. 28N, 4 I/Yr, 11000 PV,-1,800,000</li> <li>FV, PMT</li> <li>a. 4%-2,939.38/2,958.43</li> <li>b. 8%-1,533.60/1,513.71</li> <li>c. 12%-804.81/765.41</li> </ul>	Because you won't run out of money (10x12)= N, (9/12)=I/Yr, 28000 PV, -1500 PMT, FV d. 364,776 / 393,931 (15x12)= N, (9/12)=I/Yr, 28000 PV, -1500 PMT, FV e. 443,834 / 502,786
	17 N, 20000 PV, -(1800x12)= PMT, 0 FV, I/Yr f - 9 1 / 8 13