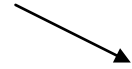


All PMTs are EOP unless otherwise stated or indicated



**Print Name**

1. A trust account contains \$100,000. On the first day of each month, \$2,000 is withdrawn. Cash remaining in the account accrues interest at the rate of 3.5% annually, compounded monthly. How many withdrawals of \$2,000 can be made?

BOP

n	i	PV	PMT	FV
?	3.5/12	-100,000	+2,000	0
54				-95.06
<b>53</b>				+1,905.22

2. A home seller carried back a promissory note in the amount of \$50,000. The note calls for 24 payments of \$450, then payments of \$500 per month for an additional 36 months. A balloon payment of \$28,800 is due and payable with the last payment. What is the maximum amount that can be paid for this note by an investor who requires a 12% annual yield?

Enter	Display
450 CFj	450.00
24 Nj	24.00
500 CFj	500.00
35 Nj	35.00
29,300 CFj	29,300
12 g i	1.00
f NPV	<b>37,268.30</b>

Since they occur at the same time, the last payment and the balloon payment are combined.

3. An investor has an opportunity cost of 12%. What is the Net Present Value to this investor of an investment of \$25,000 which returns \$5,000 per year for 12 years?

Enter	Display
-25,000 CFo	-25,000.00
5,000 CFj	5,000.00
12 Nj	12.00
12 i	12.00
f NPV	<b>+5,971.87</b>

**OR**

n	i	PV	PMT	FV
12	12	?	5,000	0
		<b>-30,971.87</b>		

The NPV = PV minus the original investment.  
 NPV = 30,971.87 – 25,000 = **+5,971.87**

4. What monthly payment would be required to reduce a \$350,000 mortgage, payable monthly including interest at the rate of 5.25%, to \$150,000 in 15 years?

n	i	PV	PMT	FV
180	5.25/12	-350,000	?	150,000
			<b>2,264.01</b>	

This problem is viewed from the point of view of the lender (investor).