

Extra Extra Calculator Problems

Tyler wants to buy a new Harley. The cost is \$60,000. Tyler will put 10% and pay the rest in 3 equal annual payments which include interest at 8%. How much are the payments?

2nd CLR TVM

$$.10 \times 60,000 = 6,000$$

$$- + 60,000 = 54,000$$

= PV

3 N

8 I/Y

CPT PMT -20,953.81

Amortize the loan

			60,000.00	
	6,000.00		6,000.00	54,000.00
1	20,953.81	4,320.00	16,633.81	37,366.19
2	20,953.81	2,989.30	17,964.51	19,401.68
3	20,953.81	1,552.13	19,401.68	(0.00)

If Tyler made 60 monthly payments (deal still the same, 10% down and 8% interest), what would be the amount of the each payment?

2nd CLR TVM

$$.10 \times 60,000 = 6,000$$

$$- + 60,000 = 54,000$$

= PV

60 N

8/12 = I/Y

CPT PMT -1,094.93

Still on monthly payments, what would be the interest expense for the second month?

			60,000.00	
	6,000.00		6,000.00	54,000.00
1	1,094.93	360.00	734.93	53,265.07
2	1,094.93	355.10	739.83	52,525.24

Justin wants to have \$10,000,000 in the bank in thirty years. If the bank pays interest at 8% compounded semi-annually, how much does she need to deposit today to reach her goal?

2nd CLR TVM

10,000,000 FV

8/2 = I/Y

60 N

CPT PV -950,604.01

Cindy wants to withdraw \$10,000 per month for the next 5 years. She will withdraw her first amount in one month. The bank pays interest at 12% compounded monthly. How much does she need to deposit today to do this?

2nd CLR TVM
10,000 PMT
12/12 = I/Y
5 x 12 = N
CPT PV -449,550.38

Chris hit the lottery!! She has the option of taking \$520,000 today or \$90,000 per year for the next 8 years, or \$85,000 per year for the next nine years or \$1,000,000 in ten years. If she can deposit her money at 6%, ignoring taxes, which deal should she take?

Deal 1 **520,000**

Deal 2 2nd CLR TVM
90,000 PMT
8 N
6 I/Y
CPT PV **558,881.44**

Deal 3 2nd CLR TVM
85,000 PMT
9 N
6 I/Y
CPT PV **578,143.84**

Deal 4 2nd CLR TVM
10 N
6 I/Y
1,000,000 FV
CPT PV **558,394.78**