295 (/content/course/548/lesson/1732/content/33838#ef-question-14484)
296 (/content/course/548/lesson/1732/content/33838#ef-question-14517)
297 (/content/course/548/lesson/1732/content/33838#ef-question-14420)
298 (/content/course/548/lesson/1732/content/33838#ef-question-14592)
299 (/content/course/548/lesson/1732/content/33838#ef-question-14335)

RETURN TO TOPIC SELECTION

Question 1

What is the intrinsic value of a bond that matures in 20 years with a maturity value of $1,500, does not pay a coupon, and market rates for comparable bonds are 6%?

- $422.98
- $459.84
- $445.75
- $489.17

HP12C	*HP10bII+*
F, CLX, F, X>Y	SHIFT, **C ALL**
1,500, **FV**	1,500, **FV**
40, **N**	40, **N**
0, **PMT,**	0, **PMT,**
3, **I,**	3, **I/YR,**
PV	**PV**
Solution = -459.84	Solution = -459.84

Score: 0%

Question 2

Sally took out a car loan for $20,000. If she pays $1856.22 a month at the **beginning** of the month and her loan interest is 5%, how many months will it take her to pay off the loan?

- 9
- 18
- 5
- 11

*Note that the rule of thumb for loan repayment calculations is to be in END mode. However, if the question specifically says otherwise you should do what the question says.

HP12C	*HP10bII+*
G, BEG	BEGIN MODE

F, CLX, F, X>Y
1,856.22, **CHS PMT**
5 **g, I**
20,000 **PV**
0, **FV**
N
Solution = 11

SHIFT, **C ALL**
1856.22, **+/- PMT**
5/12=.4167, **I/YR**
20,000 **PV**
0, **FV**
N
Solution = 11

Score: 0%

Question 3

Lisa purchased a watch some time ago for $30,635.55. She is able to sell the watch today for $20,000. How many years ago did she buy the watch if the watch depreciated at a rate of -3% per year?

- 14
- 18
- 22
- 11

HP12C
F, CLX, F, X>Y
G, END
30,635.55, **CHS PV**
20,000, **FV**
-3 **I,**
Solve for **N** = 14

HP10bII+
END MODE
SHIFT, **C ALL**
30,635.55, **+/- PV**
20,000, **FV**
-3 **I/YR,**
Solve for **N** = 14

Score: 0%

Question 4

Poe was run over by his local mail truck. The courts awarded Poe a sum of $7,000,000 as pain and suffering and he now plans to withdraw equal monthly amounts for the next 24 months. If he can earn 15% compounded monthly on the lump sum, how much will he be able to withdraw at the beginning of each month?

- $339,406.54
- $335,216.33
- $339,893.21
- $335,092.79

HP12C
G, BEG
F, CLX, F, X>Y
7,000,000, **CHS PV**
15, **G I**

HP10bII+
BEGIN MODE
SHIFT, **C ALL**
7,000,000, **+/- PV**
15/12, (= 1.25) **I/YR**

24, **N**
0, **FV**
PMT,
Solution = $335,216.33

24, **N**
0, **FV**
PMT,
Solution = $335,216.33

Score: 0%

Question 5

Sunni was recently awarded $26,179.73 as part of a court settlement. If she invests the money at a 6% annual return how many years will it take her to reach $100,000?

- 23
- 19
- 27
- 32

HP12C

F, CLX, F, X>Y

26,179.73 **CHS PV**

6 **I**

100,000 **FV**

N

Solution = 23

HP10BII+

Shift, C ALL

26,179.73 +/- **PV**

6 **I**

100,000 **FV**

N

Solution = 23

Score: 0%

Question 6

What is the YTC of a bond that matures in 24 years with a maturity value of $1,000, pays a 6% coupon (paid semi-annually), and the current price is $1,098? The bond is callable in 7 years at a special call price of $1,045.

- 3.1863
- 4.8777
- 4.2155
- 3.0985

HP12C
End Mode
F, CLX, F, X>Y
1,045, **FV**

HP10bII+
End Mode
SHIFT, **C ALL**
1,045, **FV**

14, **N**	14, **N**
30, **PMT**	30, **PMT**
1098 **CHS PV**	1098 **+/- PV**
I,	**I/YR,**
Solution = 2.4388 x2 = 4.8777	Solution = 2.4388 x2 = 4.877

Score: 0%

Question 7

Aaron borrowed $20,000 from his mother for the down payment on a house. He paid her back $90,000 at the end of 10 years. What was the average annual compound interest rate on Aarons's loan to his mother?

- 16.5566
- 16.2308
- 16.9923
- 16.3124

HP12C	*HP10bII+*
F, CLX, F, X>Y	END MODE
G, END	SHIFT, **C ALL**
20,000, **CHS PV**	20,000, **+/- PV**
90,000, **FV**	90,000, **FV**
10, **N**	10, **N**
0, **PMT,**	0, **PMT,**
I,	**I/YR,**
Solution = 16.2308	Solution = 16.2308

Score: 0%

Question 8

Billy took out a $2,962.51 loan from his local credit union. He has to pay back $50 every quarter on the first of the month. How many **years** will it take him to pay off the loan if the credit union charges him a 6% interest rate?

- 33
- 29
- 37
- 35

HP12C	*HP10bII+*
G, BEG	BEGIN MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
50, **CHS PMT**	50, **+/- PMT**

6 **enter** 4 **/**, **I**
2,962.51 **PV**
0, **FV**
N
Solution = 140 / 4 = 35

6/4= 1.5, **I/YR**
2,962.51 **PV**
0, **FV**
N
Solution = 140 / 4 = 35

Score: 100%

Question 9

Corbin needs to withdraw $6,000 from an investment account at the beginning of each year for spending money while in college and med school. He expects to earn 9% compounded annually in his account. What lump sum must be deposited in order to withdraw this amount if he is expected to stay in school for 8 years?

- $36,197.72
- $36,583.23
- $36,389.90
- $36,790.45

HP12C
G, BEG
F, CLX, F, X>Y
6000, **CHS PMT** (since this is a cash out flow, enter the amount as a negative number)
9, **I**
8, **N**
PV,
Solution = 36,197.7170 or $36,197.72

HP10bII+
BEGIN MODE
SHIFT, **C ALL**
6000, **+/- PMT** (since this is a cash out flow, enter the amount as a negative number)
9, **I/YR**
8, **N**
PV,
Solution = 36,197.7170 or $36,197.72

Score: 0%

Question 10

John wants to purchase his dream house in 6 years. He expects it to cost roughly $500,000 at the time of purchase. How much must he deposit today in order to have enough to purchase the house if he earns 10% on his investments and he already has $50,000 saved?

- 232,743.98
- 232,236.97
- 232,485.13
- 232,984.18

HP12C
F, CLX, F, X>Y
$500,000 **FV**
10, **I**

HP10bII+
SHIFT, **C ALL**
$500,000 **FV**
10, **I/YR**

6, **N**
PV,
Solution = 282,236.97 – 50,000 = 232,236.97

6, **N**
PV,
Solution = 282,236.97 – 50,000 = 232,236.97

Score: 0%

Question 11

XYZ corporation has committed to pay ABC, Inc $150,000 at the beginning of each year for the next 100 years in a licensing deal. How much must XYZ deposit today, assuming an interest rate of 8% compounded annually, if it wants to meet its annual obligation?

- $2,842,903.02
- $2,754,792.14
- $2,024,079.45
- $2,489,104.73

HP12C
G, BEG
F, CLX, F, X>Y
150000, **CHS PMT**
8, **I**
100, **N**
0, FV,
PV
Solution = 2,024,079.446 or $2,024,079.45

HP10bII+
BEGIN MODE
SHIFT, **C ALL**
150000, **+/- PMT**
8, **I/YR**
100, **N**
0, FV,
PV
Solution = 2,024,079.446 or $2,024,079.45

Score: 0%

Question 12

What is the YTM of a bond that matures in 20 years with a maturity value of $1,000, pays a 2% coupon (paid semi-annually), and the current price is $950?

- 2.45
- 2.73
- 2.31
- 2.98

HP12C
End Mode
F, CLX, F, X>Y
1,000, **FV**
40, **N**
10, **PMT,**
950 **CHS PV**
I,
Solution = 1.1569 x2 = 2.31

HP10bII+
End Mode
SHIFT, **C ALL**
1,000, **FV**
40, **N**
10, **PMT,**
950 **+/- PV**
I/YR,
Solution = 1.1569 x2 = 2.31

Score: 0%

Question 13

Aaron borrowed $475,000 from a bank to purchase of a home. At the end of 25 years Aaron had paid back $625,000 to the bank for the loan. What was the average annual compound interest rate on the bank loan?

- 1.2654
- 1.1038
- 1.1874
- 1.1463

HP12C	*HP10bII+*
F, CLX, F, X>Y	END MODE
G, END	SHIFT, **C ALL**
475,000, **CHS PV**	475,000, **+/- PV**
625,000 **FV**	625,000 **FV**
25 **N**	25 **N**
0, **PMT,**	0, **PMT,**
I,	**I/YR,**
Solution = 1.1038	Solution = 1.1038

Score: 0%

Question 14

Bently took out a $500,000 loan from his local credit union. He has to pay back $86,988.97 every quarter on the first of the month. How many **years** will it take him to pay off the loan if the credit union charges him a 7% interest rate?

- 1.5
- 1.9
- 1.7
- 1.1

HP12C	*HP10bII+*
G, BEG	BEGIN MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
86,988.97, **CHS PMT**	86,988.97, **+/- PMT**
7 **enter** 4 **/**, **I**	7/4= 1.75, **I/YR**
500,000 **PV**	500,000 **PV**
0, **FV**	0, **FV**
N	**N**
Solution = 6 / 4 = 1.5	Solution = 6 / 4 = 1.5

Score: 0%

Question 15

What is the YTM of a zero coupon bond that matures in 1 year with a maturity value of $1,200, does not pay a coupon, and the current price is $900?

- 30.9402
- 32.1415
- 31.9933
- 32.3748

HP12C	*HP10bII+*
End Mode	End Mode
F, CLX, F, X>Y	SHIFT, **C ALL**
1,200, **FV**	1,200, **FV**
2, **N**	2, **N**
900 **CHS PV**	900 **+/- PV**
I,	**I/YR,**
Solution = 15.4701 x2 = 30.9402	Solution = 15.4701 x2 = 30.9402

Score: 0%

Question 16

Eli borrowed $375,000 from a bank to purchase of a home. At the end of 30 years Eli had paid back $725,000 to the bank for the loan. What was the average annual compound interest rate on the bank loan?

- 2.2154
- 2.2218
- 2.3451
- 2.8563

HP12C	*HP10bII+*
F, CLX, F, X>Y	END MODE
G, END	SHIFT, **C ALL**
375,000, **CHS PV**	375,000, **+/- PV**
725,000 **FV**	725,000 **FV**
30 **N**	30 **N**
0, **PMT,**	0, **PMT,**
I,	**I/YR,**
Solution = 2.2218	Solution = 2.2218

Score: 0%

Question 17

What is the Future Value of a monthly annuity of $150 beginning today and continuing for 25 years if the annual earnings rate is 4%?

- $78,245.25
- $77,376.50
- $77,129.66
- $77,563.88

HP12C	*HP10bII+*
G, BEG	BEGIN MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
150, **CHS PMT**	150, **+/- PMT**
4 **G, I**	4/12, (= .33333), **I/YR**
25 **G, N**	25x12, (= 300), **N**
FV,	**FV**,
Solution = 77,376.4969 or $77,376.50	Solution = 77,376.4969 or $77,376.50

Score: 0%

Question 18

Bianca plans to attend a university in 10 years that will have a total cost of $250,000. What amount must she deposit today in order to have enough to make full payment on the first day of school if she earns 9% on her investments.

- 105,602.70
- 106,432.83
- 106,842.20
- 105,485.43

HP12C	*HP10bII+*
F, CLX, F, X>Y	SHIFT, **C ALL**
$250,000 **FV**	$250,000 **FV**
9, **I**	9, **I/YR**
10, **N**	10, **N**
PV,	**PV**,
Solution = 105,602.70	Solution = 105,602.70

Score: 0%

Question 19

Steve wants to purchase his dream house in 4 years. He expects it to cost roughly $100,000 at the time of purchase. How much must he deposit today in order to have enough to purchase the house if he earns 5% on his investments and he has $50,000 saved already?

- 32,270.25
- 32,485.32
- 32,908.56
- 32,874.12

HP12C

F, CLX, F, X>Y
$100,000 **FV**
5, **I**
4, **N**
PV,
Solution = 82,270.25 – 50,000 = 32,270.25

HP10bII+

SHIFT, **C ALL**
$100,000 **FV**
5, **I/YR**
4, **N**
PV,
Solution = 82,270.25 – 50,000 = 32,270.25

Score: 0%

Question 20

Alyssa purchased an expensive watch 5 years ago for $30,000. She's able to sell the watch today for $22,000. What is the average annual compound rate of return on Alyssa 's watch?

- -6.0146
- -6.4592
- -6.2854
- -6.7839

HP12C

F, CLX, F, X>Y
G, END
30000, **CHS PV**
22000, **FV**
5 **N**
0, **PMT,**
I,
Solution = -6.0146

HP10bII+

END MODE
SHIFT, **C ALL**
30000, **+/- PV**
22000, **FV**
5 **N**
0, **PMT,**
I/YR,
Solution = -6.0146

Score: 0%

Question 21

Your client is worried about how inflation will impact their portfolio and their ability to pay for their future goals. If they are averaging 2% return on their portfolio and inflation is expected to average 7% over the next 10 years, what is their real rate of return?

- -4.7
- -2.6
- -5.2
- -5.7

1.02 / 1.07 = .953 -1 = -.047 = -4.7%

Score: 0%

Question 22

Ian recently purchased a split family home for $700,000. His down payment was 20% of the purchase price and he borrowed the remaining 80% with a 15 year, fixed-rate mortgage. Due to his poor credit score, the interest rate was 18%. How much is Ian's monthly payment?

- $8,885.08
- $9,018.36
- $7,000
- $9,999.59

HP12C	*HP10bII+*
G, END	END MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
700,000 **Enter** .8, **X** (= 560,000) **CHS PV**	700,000 x .8, (= 560,000) **+/- PV**
15 **G**, **N**	15x12, (= 180), **N**
18 **G I,**	18/12, (= 1.5) **I/YR,**
PMT,	**PMT,**
Solution = $9,018.36	Solution = $9,018.36

Score: 100%

Question 23

You are considering purchasing a stock with the following returns over the last 5 years.

Year 1	15%
Year 2	12%
Year 3	8%

Year 4	2%
Year 5	35%

What is the standard deviation of the stock's returns?

- 12.5
- 12.7
- 13.9
- 13.2

HP12C	***HP10BII+***
F, CLX, F, X>Y	SHIFT, **C ALL**
15 **Σ+**	15 **Σ+**
12 **Σ+**	12 **Σ+**
8 **Σ+**	8 **Σ+**
2 **Σ+**	2 **Σ+**
35 **Σ+**	35 **Σ+**
G S = 12.5	SHIFT SxSy = 12.5

Score: 0%

Question 24

Ona inherited $25,000 from her grandfather. She plans to invest the money for the next 50 years and believes she will earn 7% annually after tax. How much will her earnings be at the end of 50 years?

- $736,894.23
- $736,425.63
- $736,359.21
- $736,902.32

HP12C	*HP10BII+*
F, CLX, F, X>Y	Shift, C ALL
$25,0000,000 **CHS PV**	+/- $25,000 PV
50 **N**	50 N
7 **I**	7 I/YR
Solve for **FV** = $736,425.63	Solve for FV = $736,425.63

Score: 0%

Question 25

Yone has been saving for kids' school for the past 18 years. At the beginning of each month, he deposits $500 into a taxable account paying 7.5% compounded monthly. How much is in the account after 18 years?

- $229,456.90
- $228,720.91
- $228,542.15
- $228,129.13

HP12C	*HP10bII+*
G, BEG	BEGIN MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
500, **CHS PMT**	500, **+/- PMT**
7.5 **G, I**	7.5/12, (= .6250) **I/YR**
18 **G, N**	18x12, (= 216), **N**
FV,	**FV**,
Solution = 228,720.9069 or $228,720.91	Solution = 228,720.9069 or $228,720.91

Score: 0%

Question 26

Sam lent his daughter Gwen $9,000 to purchase a used car. Gwen paid back $12,500 to her father at the end of 5 years. What was average annual interest rate that Gwen paid on the loan?

- 6.7907
- 5.8372
- 6.0942
- 6.3804

HP12C	*HP10bII+*
F, CLX, F, X>Y	END MODE
G, END	SHIFT, **C ALL**
9,000, **CHS PV**	9,000, **+/- PV**
12,500, **FV**	12,500, **FV**
5, **N**	5, **N**
0, **PMT,**	0, **PMT,**
I	**I/YR,**
Solution = 6.7907	Solution = 6.7907

Score: 0%

Question 27

Trina invested $50,000 in an account earning 1.5% compounded quarterly. What is the value of the account at the end of 10 years, assuming the interest generated is reinvested back into the account?

- $58,075.42
- $58,189.45
- $58,498.28
- $58,978.32

HP12C	*HP10BII+*
F, CLX, F, X>Y	Shift, C ALL
$50,000 **CHS PV**	+/- $50,000 PV
10 **Enter** 4 **X** (= 40) **N**	10 x 4 = 40 N
1.5 **Enter** 4 **/** (= .375) **I**	1.5 / 4 = .375 I/YR
Solve for **FV** = $58,075.42	Solve for FV = $58,075.42

Score: 0%

Question 28

What is the intrinsic value of a bond that matures in 10 years with a maturity value of $1,000, pays a 9% coupon (paid semi-annually), and market rates for comparable bonds are 5%?

- $1,137.34
- $1,198.21
- $1,311.78
- $1,184.88

HP12C	*HP10bII+*
End Mode	End mode
F, CLX, F, X>Y	SHIFT, **C ALL**
1,000, **FV**	1,000, **FV**
20, **N**	20, **N**
45, **PMT,**	45, **PMT,**
2.5, **I,**	2.5, **I/YR,**
PV	**PV**
Solution = -1,311.78	Solution = -1,311.78

Score: 0%

Question 29

Janet's parents purchased a vacation home some time ago for $50,000. She is able to sell the house today for $2,200,000. How many years ago did her parents buy the property if it appreciated at a rate of 9.9224% per year?

- 44
- 40
- 42
- 49

HP12C
F, CLX, F, X>Y
G, END
50,000, **CHS PV**
2,200,000, **FV**
9.9224 **I,**
Solve for **N** = 40

HP10bII+
END MODE
SHIFT, **C ALL**
50,000, **+/- PV**
2,200,000, **FV**
9.9224 **I/YR,**
Solve for **N** = 40

Score: 0%

Question 30

6 years ago, Harper decided to invest $850 at the beginning of every month into a growth mutual fund. The fund has earned an average annual rate of return of 9.5% compounded monthly. How much is in Harper's account today?

- $82,711.64
- $81,478.98
- $81,873.14
- $82,297.58

HP12C

G, BEG

F, CLX, F, X>Y

850, **CHS PMT** (since this is a cash out flow, enter the amount as a negative number)

9.5, **G, I**

HP10bII+

BEGIN MODE

SHIFT, **C ALL**

850, **+/- PMT** (since this is a cash out flow, enter the amount as a negative number)

9.5/12, (= .7917) **I/YR**

6, **G, N**

FV,

Solution = 82,711.6402 or $82,711.64

6x12, (= 72) **N**

FV,

Solution = 82,711.6402 or $82,711.64

Score: 0%

Question 31

Coraline wants to save for a new car in 9 years. She expects it to cost roughly $75,000 at the time of purchase. How much must she deposit today in order to have enough to purchase the car if she earns 2.5% on her investments and she already has $10,000 saved?

- 50,034.12
- 50,129.29
- 50,099.74
- 50,054.63

HP12C

F, CLX, F, X>Y

$75,000 FV

2.5, I

9, N

PV,

Solution = 60,054.63 – 10,000 = 50,054.63

HP10bII+

SHIFT, C ALL

$75,000 FV

2.5, I/YR

9, N

PV,

Solution = 60,054.63 – 10,000 = 50,054.63

Score: 100%

Question 32

Martin wants to buy a boat, but he must borrow the money from his mother. Martin's mom lends him $6000 for the purchase, but requires that he pay her back a lump sum amount of $7000 at the end of two years. What is the average annual compound rate of interest on Jed's private loan?

- 8.4988
- 8.2974
- 8.0123
- 8.0785

HP12C	*HP10bII+*
F, CLX, F, X>Y	SHIFT, **C ALL**
6,000, **CHS PV**	6,000, **+/- PV**
7,000 **FV** 2, **N** 0, **PMT,** **I,** Solution = 8.0123	7,000 **FV** 2, **N** 0, **PMT,** **I/YR,** Solution = 8.0123

Score: 0%

Question 33

Jamie took out a car loan for $47,553.64. If she pays $1050 at the **beginning** of the month and her loan interest is 4%, how many **years** will it take her to pay off the loan?

- 4.08
- 4.82
- 4.43
- 4.74

*Note that the rule of thumb for loan repayment calculations is to be in END mode. However, if the question specifically says otherwise you should do what the question says.

HP12C	*HP10bII+*
G, BEG	BEGIN MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
1050, **CHS PMT**	1050, **+/- PMT**
4 **g, I**	4/12=.3333, **I/YR**
47,553.64 **PV**	47,553.64 **PV**
0, **FV**	0, **FV**
N	**N**
Solution = 49 / 12 = 4.08	Solution = 49 / 12 = 4.08

Score: 0%

Question 34

Becky transfers $100 into an investment account at the beginning of each month. The account earns 7% compounded monthly. How much is in Becky's account at the end of 8 years?

- $12,894.67
- $12,973.36
- $12,209.47

◉ $12,469.84

HP12C	*HP10bII+*
G, BEG	BEGIN MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
100 **CHS PMT**	100 **+/- PMT**
7 **G, I**	7/12, (= .5833) **I/YR**
8 **G, N**	8x12, (= 96) **N**
FV,	**FV**,
Solution = 12,894.6647 or $12,894.67	Solution = 12,894.6647 or $12,894.67

Score: 0%

Question 35

Samantha wants to withdraw $750 on the first of each month for the next 15 years. She also wants to have $35,000 remaining in the account at the end of 15 years. What amount should Samantha deposit today, if she expects to earn 8% compounded monthly in her account?

○ $89,389.23
○ $89,587.51
○ $89,439.12
◉ $89,754.90

HP12C	*HP10bII+*
G, BEG	BEGIN MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
750, **PMT**	750, **PMT**
8, **G, I**	8/12, (=.6667), **I/YR**
15, **G N**	12x15, (= 180) **N**
35000, **FV**	35000, **FV**
PV,	**PV**,
Solution = 89,587.5089 or $89,587.51	Solution = 89,587.5089 or $89,587.51

Score: 0%

Question 36

Erin and Mike just bought their first home together for $295,000. They made a 30% down payment and financed the rest over 15 years, securing with a 2.85% fixed rate loan. The couple believes they will stay in the house for five years and want to know how much interest they will pay over these first five years.

○ $24,534.21
○ $25,371.68

- $24,457.34
- $24,245.12

HP12C
Step 1
F, CLX, F, X>Y
G, END
295,000 **Enter** .70, **X** (= 206,500) **CHS PV**
0, **FV**
15 **G 12X** (= 180) **N**
2.85 **G 12/** (= .2375) **I,**
PMT,
Solution = 1,411.2011 or $1411.20
Step 2
60 (12 x 5 years) F, **AMORT**,

Solution = 25,371.68

HP10bII+
Step 1
END MODE
SHIFT, **C ALL**
295,000 x .70, (= 206,500) **+/- PV**
0, **FV**
15x12, (= 180) **N**
2.85 / 12, (= .2375) **I/YR,**
PMT,
Solution = 1,411.2011 or $1411.20
Step 2
1[INPUT] 60 (12 x 5 years)
SHIFT, [AMORT],
=, =
Solution = 25,371.68

Score: 0%

Question 37

Dorothy plans to attend a university in 5 years that will have a total cost of $150,000. What amount must she deposit today in order to have enough to make full payment on the first day of school if she earns 7% on her investments.

- 106,834.32
- 106,983.99
- 106,947.93
- 106,873.11

HP12C
F, CLX, F, X>Y
$150,000 **FV**
7, **I**
5, **N**
PV,
Solution = 106,947.93

HP10bII+
SHIFT, **C ALL**
$150,000 **FV**
7, **I/YR**
5, **N**
PV,
Solution = 106,947.93

Score: 0%

Question 38

What is the YTC of a bond that matures in 24 years with a maturity value of $1,000, pays an 5% coupon (paid semi-annually), and the current price is $1,000? The bond is callable in 20 years at a special call price of $1,050.

- 5.741
- 5.146
- 5.322
- 5.486

HP12C
End Mode
F, CLX, F, X>Y
1,050, **FV**
40, **N**
25, **PMT**
1000 **CHS PV**
I,
Solution = 2.5730 x2 = 5.1460

HP10bII+
End Mode
SHIFT, **C ALL**
1,050, **FV**
40, **N**
25, **PMT**
1000 **+/- PV**
I/YR,
Solution = 2.5730 x2 = 5.1460

Score: 0%

Question 39

The CEO of Tiny Corp, Inc. will invest $40,000 at the beginning of each year for the next 6 years in a fund paying 10% compounded annually. What is the value of this investment at the end of 6 years?

- $339,783.90
- $339,351.89
- $339,843.92
- $339,486.84

HP12C

G, BEG

F, CLX, F, X>Y

40000, **CHS PMT**

10, **I**

6, **N**

FV,

Solution = 339,486.84 or $339,486.84

HP10bII+

BEG MODE

SHIFT, **C ALL**

40000, **+/- PMT**

10, **I/YR**

6, **N**

FV,

Solution = 339,486.84 or $339,486.84

Score: 100%

Question 40

Marissa purchased an expensive watch 3 years ago for $20,000. She's able to sell the watch today for $22,000. What is the average annual compound rate of return on Marissa's watch?

- 3.2280
- 3.4909
- 3.2560
- 3.7512

HP12C	*HP10bII+*
F, CLX, F, X>Y	END MODE
G, END	SHIFT, **C ALL**
20000, **CHS PV**	20000, **+/- PV**
22000, **FV**	22000, **FV**
3 **N**	3 **N**
0, **PMT,**	0, **PMT,**
I,	**I/YR,**
Solution = 3.2280	Solution = 3.2280

Score: 0%

Question 41

At the end of March Abby decides to take a sabbatical and live off her savings of $20,000 for the rest of the year. She expects to earn 8% compounded annually on her account. What lump sum can she withdraw at the beginning of each month and still have enough to last her for the full timeframe?

- $2,188.99
- $2,296.95
- $2,281.74
- $2,095.34

HP12C	*HP10bII+*
G, BEG	BEGIN MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
8/12 = .666, **I**	8/12 = .666, **I/YR**
9, **N**	9, **N**
20,000 **PV**,	20,000 **PV**,
PMT	**PMT**
Solution = $2,281.74	Solution = $2,281.74

Score: 0%

Question 42

William bought a zero-coupon bond 20 years ago at a 30% discount from the bond's par value. The bond compounds annually, matures today, and he redeems the par value of the bond. What is William's average annual compound rate of return on the bond purchase?

- 1.7787
- 1.7458
- 1.7197
- 1.7994

HP12C	*HP10bII+*
F, CLX, F, X>Y	END MODE
G, END	SHIFT, **C ALL**
1000 **Enter** .7, **X** (= 700) **CHS PV**	1000 x .7, (= 700) **+/- PV**
1000, **FV**	1000, **FV**
20 **N**	20 **N**
0, **PMT,**	0, **PMT,**
I,	**I/YR,**
Solution = 1.7994	Solution = 1.7994

Score: 100%

Question 43

Richie invested $89,750 in an account earning 5% compounded quarterly. What is the value of the account at the end of 10 years, assuming the interest generated is reinvested back into the account?

- $142,428.73
- $131,398.68
- $155,686.78
- $147,514.85

HP12C	*HP10BII+*
F, CLX, F, X>Y	Shift, C ALL
$89,750 **CHS PV**	+/- $89,750 PV
10 **Enter** 4 **X** (= 40) **N**	10 x 4 = 40 N
5 **Enter** 4 **/** (= 1.25) **I**	5 / 4 = 1.25 I/YR
Solve for **FV** = $147,514.85	Solve for FV = $147,514.85

Score: 100%

Question 44

Jillian purchased a boat some time ago for $57,238.22. She is able to sell the boat today for $5,000. How many years ago did she buy the boat if the boat appreciated at a rate of -15% per year?

- 11
- 15
- 18
- 19

HP12C	*HP10bII+*
F, CLX, F, X>Y	END MODE
G, END	SHIFT, **C ALL**
57,238.22, **CHS PV**	57,238.22, **+/- PV**
5,000, **FV**	5,000, **FV**
-15 **I,**	-15 **I/YR,**
Solve for **N** = 15	Solve for **N** = 15

Score: 0%

Question 45

Kelly recently purchased her dream home for $800,000. Her down payment was 20% of the purchase price and she borrowed the remaining 80% with a 15 year, fixed-rate mortgage. The interest rate was 2%. How much is Kelly's monthly payment?

- $4,118.46
- $5,326.75
- $3,958.60
- $4,650.55

HP12C	*HP10bII+*
F, CLX, F, X>Y	END MODE
G, END	SHIFT, **C ALL**
800,000 **Enter** .8, **X** (= 640,000) **CHS PV**	800,000 x .8, (= 640,000) **+/- PV**
15 **G**, **N**	15x12, (= 180), **N**
2 **G I,**	2/12, (= .1667) **I/YR,**
PMT,	**PMT,**
Solution = $4,118.46	Solution = $4,118.46

Score: 0%

Question 46

Sean won $25,000,000 from the lottery. He plans to invest the money for the next 5 years and believes he will earn 7% annually after tax. How much will his earnings be at the end of 5 years?

- $35,289,382.12

- $35,093,190.34
- $35,063,793.27
- $35,198,320,43

HP12C	*HP10BII+*
F, CLX, F, X>Y	Shift, C ALL
$25,0000,000 **CHS PV**	+/- $25,0000,000 PV
5 **N**	5 N
7 **I**	7 I/YR
Solve for **FV** = $35,063,793.27	Solve for FV = $35,063,793.27

Score: 0%

Question 47

Jimbo thinks CDs are a fantastic investment and decided to purchase a bank-issued certificate of deposit, 2 years ago, for $970. It matures today for $1000. What is the average annual compound rate of return on his investment?

- 1.4210
- 1.5892
- 1.5346
- 1.974

HP12C	*HP10bII+*
F, CLX, F, X>Y	END MODE
G, END	SHIFT, **C ALL**
970, **CHS PV**	970, **+/- PV**
1000, **FV**	1000, **FV**
2 **N**	2 **N**
0, **PMT,**	0, **PMT,**
I,	**I/YR,**
Solution = 1.5346	Solution = 1.5346

Score: 0%

Question 48

You are considering purchasing a stock with the following returns over the last 5 years.

Year 1	5%
Year 2	2%
Year 3	18%
Year 4	12%
Year 5	5%

What is the standard deviation of the stock's returns?

- 6.7
- 6.5
- 6.1
- 6.3

HP12C	***HP10BII+***
F, CLX, F, X>Y	SHIFT, **C ALL**
5 **Σ+**	5 **Σ+**
2 **Σ+**	2 **Σ+**
18 **Σ+**	18 **Σ+**
12 **Σ+**	12 **Σ+**
5 **Σ+**	5 **Σ+**
G S = 6.5	SHIFT SxSy = 6.5

Score: 0%

Question 49

Yanis wants to purchase his dream house in 20 years. He expects it to cost roughly $100,000 at the time of purchase. How much must he deposit today in order to have enough to purchase the house if he earns 8% on his investments and he has $5,000 saved already?

- 16,875.34
- 16,454.82
- 16,973.78
- 16,398.90

HP12C	*HP10bII+*
F, CLX, F, X>Y	SHIFT, **C ALL**
$100,000 **FV**	$100,000 **FV**
8, **I**	8, **I/YR**
20, **N**	20, **N**
PV,	**PV**,
Solution = 21,454.82 – 5,000 = 16,454.82	Solution = 21,454.82 – 5,000 = 16,454.82

Score: 0%

Question 50

What is the intrinsic value of a bond that matures in 10 years with a maturity value of $1,000, pays a 4% coupon (paid semi-annually), and market rates for comparable bonds are 8%?

- $714.42
- $739.07
- $728.19
- $798.34

HP12C	*HP10bII+*
End Mode	*End Mode*
F, CLX, F, X>Y	SHIFT, **C ALL**
1,000, **FV**	1,000, **FV**
20, **N**	20, **N**
20, **PMT,**	20, **PMT,**
4, **I,**	4, **I/YR,**
PV	**PV**
Solution = -728.19	Solution = -728.19

Score: 0%

Question 51

Lori wants to save for a new car in 5 years. She expects it to cost roughly $13,000 at the time of purchase. How much must she deposit today in order to have enough to purchase the car if she earns 5% on her investments and she already has $3,000 saved?

- 5,983.32
- 7,185.84
- 6,730.09
- 7,734.99

HP12C	HP10bII+
F, CLX, F, X>Y	SHIFT, C ALL
$13,000 FV	$13,000 FV
5, I	5, I/YR
5, N	5, N
PV,	PV,
Solution = 10,185.84 – 3,000 = 7,185.84	Solution = 10,1185.84 – 3,000 = 7,185.84

Score: 0%

Question 52

Bruce, a conservative investor, will enter retirement next year with $675,000 in his IRA. He plans to make monthly withdrawals from his retirement account at the beginning of each month and will earn 4.75%, compounded monthly, on his retirement savings. If he makes theses withdrawals for the next 26.5 years, how much will he receive each month?

- $3,720.67
- $3,725.45
- $3,790.14
- $3,755.99

HP12C	*HP10bII+*
G, BEG	BEGIN MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
675,000, **CHS PV**	675,000, **+/- PV**
4.75, **G I**	4.75/12, (= .3958) **I/YR**
26.5, **G N**	26.5x12 (= 318), **N**
0, **FV**	0, **FV**
PMT,	**PMT,**
Solution = $3,720.67	Solution = $3,720.67

Score: 0%

Question 53

What is the intrinsic value of a bond that matures in 10 years with a maturity value of $1,000, pays a 9% coupon (paid semi-annually), and market rates for comparable bonds are 8%?

- $1032.33
- $1073.98
- $1055.15
- $1067.95

HP12C	*HP10bII+*
End Mode	*End Mode*
F, CLX, F, X>Y	SHIFT, **C ALL**
1,000, **FV**	1,000, **FV**
20, **N**	20, **N**

45, **PMT,**
4, **I,**
PV
Solution = -1067.95

45, **PMT,**
4, **I/YR,**
PV
Solution = -1067.95

Score: 100%

Question 54

What is the Arithmetic Average of a fund that over the last 7 years has experienced the following annual returns?

Year 1 10%

Year 2 10%

Year 3 1%

Year 4 0%

Year 5 (- 6%)

Year 6 (- 2%)

Year 7 8%

- 1
- 2
- 3
- 4

10 + 10 + 1 + 0 – 6 – 2 + 8 = 21

21/ 7 = 3

Score: 0%

Question 55

Sam decided to save for his dream home in 30 years. Sam contributes $17,000 into an account on the last day of each year. What return must Sam make if he wants to buy a $1,000,000 home?

- 4.2842
- 4.4565
- 4.7685
- 4.1341

HP12C
G, END
F, CLX, F, X>Y
17,000 **CHS PMT**

HP10bII+
END MODE
SHIFT, **C ALL**
17,000, **+/- PMT**

30 **N**	30 **N**
1,000,000 **FV**,	1,000,000 **FV**,
I	**I**
Solution = 4.2842	Solution = 4.2842

Score: 0%

Question 56

Sally receives semiannual bonuses worth $500 from her job, paid at the beginning and middle of each year. She does not need the bonuses for living expenses and has been investing them for the past 9 years in a taxable brokerage account. How much is in her account if the investments have returned 8% compounded semiannually?

- $13,258.90
- $13,124.83
- $13,335.62
- $13,318.16

HP12C	*HP10bII+*
G, BEG	BEGIN MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
500, **CHS PMT**	500, **+/- PMT**
8 **Enter** 2 **/**, (= 4), **I**	8/2, (= 4), **I/YR**
9 **Enter** 2 **X**, (= 18), **N**	9x2, (= 18), **N**
FV,	**FV**,
Solution = 13,335.6147 or $13,335.62	Solution = 13,335.6147 or $13,335.62

Score: 0%

Question 57

James needs to take out $8,000 from an investment account at the beginning of each year for the next 6 years. He expects to earn 3% compounded annually in his account. What lump sum must be deposited in order to withdraw this amount?

- $44,854.23
- $44,637.66
- $44,271.45
- $44,892.34

HP12C	*HP10bII+*
G, BEG	BEGIN MODE
F, CLX, F, X>Y	SHIFT, **C ALL**

8000, **CHS PMT** (since this is a cash out flow, enter the amount as a negative number)
3, **I**
6, **N**
PV,
Solution = 44,637.66 or $44,637.66

8000, **+/- PMT** (since this is a cash out flow, enter the amount as a negative number)
3, **I/YR**
6, **N**
PV,
Solution = 44,637.66 or $44,637.66

Score: 0%

Question 58

In the early 1960s the average inflation rate was 1.72%. If your portfolio average 5% in that time frame what would be your real rate of return?

- 3.2
- 4.1
- 6.6
- 7.5

1.05 / 1.0172 = (1.0322 – 1) x100 = 3.2%

Score: 0%

Question 59

Kendall won $125,000 from the lottery. He plans to invest the money for the next 15 years and believes he will earn 6% annually after tax. How much will his portfolio be at the end of 15 years?

- $299,569.77
- $275,001.65
- $285,456.23
- $297,963.78

HP12C
F, CLX, F, X>Y
$125,000 **CHS PV**
15 **N**
6 **I**
Solve for **FV** = $299,569.77

HP10BII+
Shift, C ALL
+/- $125,000 PV
15 N
6 I/YR
Solve for FV = $299,569.77

Score: 0%

Question 60

Johnny recently won the lottery for $20.5 million dollars. Assuming he lives for another 30 years, how much can he withdraw at the beginning of each year if he earns a 2% return on his investments?

- $934,421.88
- $925,813.09
- $897,375.89
- $915,323.41

HP12C	*HP10bII+*
G, BEG	BEGIN MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
2, **I**	2, **I/YR**
30, **N**	30, **N**
20,500,000 **PV**,	20,500,000 **PV**,
PMT	**PMT**
Solution = $897,375.89	Solution = $897,375.89

Score: 0%

Question 61

Your client is thinking about purchasing a house in a nearby neighborhood. Recent homes in the area have sold for the following amounts. What is the standard deviation of home prices in the area?

$450,000
$500,000
$145,000
$350,000
$250,000

- $144,743.45
- $144,844.75
- $144,753.23
- $144,873.09

HP12C	***HP10BII+***
F, CLX, F, X>Y	SHIFT, **C ALL**
450,000 **Σ+**	450,000 **Σ+**
500,000 **Σ+**	500,000 **Σ+**
145,000 **Σ+**	145,000 **Σ+**
350,000 **Σ+**	350,000 **Σ+**
250,000 **Σ+**	250,000 **Σ+**
G S = 144,844.75	SHIFT SxSy = **144,844.75**

Score: 0%

Question 62

Lola plans to attend a university in 2 years that will have a total cost of $20,000. What amount must she deposit today in order to have enough to make full payment on the first day of school if she earns 2% on her investments.

- 19,384.43
- 19,223.38
- 19,983,09
- 19,487.32

HP12C	*HP10bII+*
F, CLX, F, X>Y	SHIFT, **C ALL**
$20,000 **FV**	$20,000 **FV**
2, **I**	2, **I/YR**
2, **N**	2, **N**
PV,	**PV**,
Solution = 19,223.38	Solution = 19,223.38

Score: 0%

Question 63

Justin took out a $152,516.42 loan from his rich uncle. He has to pay back $5,000 every quarter on the first of the month. How many **years** will it take him to pay off the loan if his uncle charges him a 2% interest rate?

- 8.25
- 8.11
- 8.34
- 8.28

HP12C	*HP10bII+*
G, BEG	BEGIN MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
5,000, **CHS PMT**	5,000, **+/- PMT**
2 **enter** 4 **/**, **I**	2/4=.5, **I/YR**
152,516.42 **PV**	152,516.42 **PV**
0, **FV**	0, **FV**
N	**N**
Solution = 33 / 4 = 8.25	Solution = 33 / 4 = 8.25

Score: 0%

Question 64

In the early 1980s the average inflation rate was 13.5%. If your portfolio average 37% in that time frame what would be your real rate of return?

- 20.7
- 21.6
- 41.2
- 4.20

1.37 / 1.135 = (1.207 – 1) x100 = 20.7%

Score: 0%

Question 65

Allen took out a $1,550,000 loan from his local credit union. He has to pay back $73,429.15 every quarter on the first of the month. How many **years** will it take him to pay off the loan if the credit union charges him a 7% interest rate?

- 6.5
- 6.8
- 6.9
- 6.2

HP12C
G, BEG
F, CLX, F, X>Y
73,429.15, **CHS PMT**
7 **enter** 4 **/**, **I**
1,550,000 **PV**
0, **FV**
N
Solution = 26 / 4 = 6.5

HP10bII+
BEGIN MODE
SHIFT, **C ALL**
73,429.15, **+/- PMT**
7/4= 1.75, **I/YR**
1,550,000 **PV**
0, **FV**
N
Solution = 26 / 4 = 6.5

Score: 0%

Question 66

Big Riggs, LLC has decided to purchase 10 new trucks directly from a manufacturer. Big Riggs has agreed to pay the manufacturer $125,000 at the **beginning** of each year for the next 7 years with an agreed-upon interest rate of 4%. What is the present value of these payments?

- $780,194.34
- $780,389.90
- $780,267.11
- $780,092.12

*Note that the rule of thumb for loan repayment calculations is to be in END mode. However, if the question specifically says otherwise you should do what the question says.

HP12C	*HP10bII+*
G, BEG	BEGIN MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
125000, **CHS PMT**	125000, **+/- PMT**
4, **I**	4, **I/YR**
7, **N**	7, **N**
0, **FV**	0, **FV**
PV	**PV**
Solution = 780,267.1071 or $780,267.11	Solution = 780,267.1071 or $780,267.11

Score: 0%

Question 67

Eddie has been saving for kids' school for the past 18 years. At the beginning of each month, he deposits $285 into a taxable account paying 7.5% compounded monthly. How much is in the account after 18 years?

- $130,370.92
- $130,654.90
- $130,423.21
- $130,689.15

HP12C	*HP10bII+*
G, BEG	BEGIN MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
285, **CHS PMT**	285, **+/- PMT**
7.5 **G, I**	7.5/12, (= .6250) **I/YR**
18 **G, N**	18x12, (= 216), **N**
FV,	**FV**,
Solution = 130,370.9169 or $130,370.92	Solution = 130,370.9169 or $130,370.92

Score: 0%

Question 68

Jerry's games and hobbies, LLC has decided to open a new store and has taken out a loan for $50,000. Jerry has agreed to pay the bank $5,000 at the beginning of each year with an agreed-upon interest rate of 5.7187%. How many years will it take them to pay off the store?

- 12
- 15
- 14
- 17

HP12C
G, BEG
F, CLX, F, X>Y
5,000, **CHS PMT**
5.7187, **I**
50,000 **PV**
0, **FV**
N
Solution = 14

HP10bII+
BEGIN MODE
SHIFT, **C ALL**
5,000, **+/- PMT**
5.7187, **I/YR**
50,000 **PV**
0, **FV**
N
Solution = 14

Score: 0%

Question 69

Mark would like to take a 3-year sabbatical. He calculates he will need $10,250 at the beginning of each month for three years. Assuming a 9.75% interest rate compounded monthly, how much must Mark deposit now to reach his goal?

- $321,409.03
- $310,983.32
- $351,730.22
- $311,298.15

HP12C
G, BEG
F, CLX, F, X>Y
10250, **CHS PMT**
9.75, **G**, **I**
3, **G, N**
0, **FV**
PV
Solution = 321,409.03

HP10bII+
BEGIN MODE
SHIFT, **C ALL**
10250, **+/- PMT**
9.75/12 (=.8125), **I/YR**
3x12 (= 36), **N**
0, **FV**
PV
Solution = 321,409.03

Score: 0%

Question 70

Mike purchased a particular digital currency in 2011 for $12. Ten years later Mike sold the currency for $45,000. What is the average annual compound rate of return on Mike's investment?

- 124.567
- 126.890
- 127.721
- 127.564

HP12C	*HP10bII+*
F, CLX, F, X>Y	END MODE
G, END	SHIFT, **C ALL**
12, **CHS PV**	12, **+/- PV**
45,000, **FV**	45,000, **FV**
10, **N**	10, **N**
0, **PMT,**	0, **PMT,**
I,	**I/YR,**
Solution = 127.721	Solution = 127.721

Score: 0%

Question 71

Your client is thinking about purchasing a house in a nearby neighborhood. Recent homes in the area have sold for the following amounts. What is the standard deviation of home prices in the area?

$1,500,000
$1,615,000
$2,500,000
$3,000,000
$3,500,000

- 866,483.24
- 866,749.13
- 866,392.54
- 866,541.98

HP12C	***HP10BII+***
F, CLX, F, X>Y	SHIFT, **C ALL**
1,500,000 **Σ+**	1,500,000 **Σ+**
1,615,000 **Σ+**	1,615,000 **Σ+**
2,500,000 **Σ+**	2,500,000 **Σ+**
3,000,000 **Σ+**	3,000,000 **Σ+**
3,500,000 **Σ+**	3,500,000 **Σ+**
G S = 866,541.98	SHIFT SxSy = **866,541.98**

Score: 100%

Question 72

Danielle transfers $200 into an investment account at the beginning of each month. The account earns 5% compounded monthly. How much is in Danielle's account at the end of 6 years?

- $16,452.37
- $16,822.66
- $16,983.45
- $16,239.56

HP12C	*HP10bII+*
G, BEG	BEGIN MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
200 **CHS PMT**	200 **+/- PMT**
5 **G, I**	5/12, (= .416666) **I/YR**
6 **G, N**	6x12, (= 72) **N**
FV,	**FV**,
Solution = 16,822.6553 or $16,822.66	Solution = 16,822.6553 or $16,822.66

Score: 0%

Question 73

Jackie pays $500 in rent each month. Her grandmother wants to fund an entire year of rental payments for Jackie. How much would her grandmother need to deposit if she can earn 3% on her gift to Jackie?

- $6, 482.98
- $7,142.43
- $5,918.39
- $5,198.93

HP12C	*HP10bII+*
G, BEG	BEGIN MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
500, **CHS PMT**	500, **+/- PMT**

3 G, **I**	3/12, (= .2500) **I/YR**
1 **G**, **N**	12, **N**
0, **FV**,	0, **FV**,
PV	**PV**
Solution = 5,918.39 or $5,918.39	Solution = 5,918.39 or $5,918.39

Score: 0%

Question 74

What is the YTM of a zero coupon bond that matures in 8 years with a maturity value of $1,200, does not pay a coupon, and the current price is $900?

- 3.5652
- 3.8712
- 3.9969
- 3.6285

HP12C	*HP10bII+*
End Mode	End Mode
F, CLX, F, X>Y	SHIFT, **C ALL**
1,200, **FV**	1,200, **FV**
16, **N**	16, **N**
900 **CHS PV**	900 **+/- PV**
I,	**I/YR,**
Solution = 1.8143 x2 = 3.6285	Solution = 1.8143 x2 = 3.6285

Score: 100%

Question 75

Bill has decided to save for his daughter's wedding in 10 years. Bill puts $7,000 into a highly speculative account on the last day of each year. What return does Bill need to achieve if his daughter want's an extravagant $350,000 wedding?

- 33.1418
- 33.5688
- 33.2232
- 33.8798

HP12C	*HP10bII+*
G, END	END MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
7,000 **CHS PMT**	7,000, **+/- PMT**
10 **N**	10 **N**
350,000 **FV**,	350,000 **FV**,
I	**I**
Solution = 33.2232	Solution = 33.2232

Score: 0%

Question 76

Your client is thinking about purchasing a house in a nearby neighborhood. Recent homes in the area have sold for the following amounts. What is the standard deviation of home prices in the area?

$500,000
$600,000
$550,000
$400,000
$800,000

- (•) 148,824.42
- ( ) 148,323.97
- ( ) 148,249.43
- ( ) 148,783.21

HP12C	***HP10BII+***
F, CLX, F, X>Y	SHIFT, **C ALL**
500,000 **Σ+**	500,000 **Σ+**
600,000 **Σ+**	600,000 **Σ+**
550,000 **Σ+**	550,000 **Σ+**
400,000 **Σ+**	400,000 **Σ+**
800,000 **Σ+**	800,000 **Σ+**
G S = 148,323.97	SHIFT SxSy = **148,323.97**

Score: 0%

Question 77

Frank has decided to save for a trip around the world in 3 years. Frank contributes $30,000 into a portfolio on the last day of each year to his trip fund. How much will his account be worth if he achieves 8% growth on his investments?

- ( ) $97,392.00
- ( ) $97,475.21

- ○ $97,284.99
- ◉ $97,387.02

HP12C	*HP10bII+*
G, END	END MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
30,000 **CHS PMT**	30,000, **+/- PMT**
8 **I**	8 **I/YR**
3 **N**	3 **N**
FV,	**FV**,
Solution = $97,392.00	Solution = $97,392.00

Score: 0%

Question 78

What is the YTM of a bond that matures in 10 years with a maturity value of $1,000, a call value of $1,100, pays a 7% coupon (paid semi-annually), and the current price is $1,200?

- ○ 4.50
- ○ 4.87
- ○ 4.66
- ◉ 4.56

HP12C	*HP10bII+*
End Mode	End Mode
F, CLX, F, X>Y	SHIFT, **C ALL**
1,000, **FV**	1,000, **FV**
20, **N**	20, **N**
35, **PMT,**	35, **PMT,**
1200 **CHS PV** **I,** Solution = 2.2475 x2 = 4.50	1200 **+/- PV** **I/YR,** Solution = 2.2475 x2 = 4.50

Score: 0%

Question 79

Cal bought a zero-coupon bond 10 years ago at a 25% discount from the bond's par value. The bond compounds annually, matures today, and he redeems the par value of the bond. What is Cal's average annual compound rate of return on the bond purchase?

- 2.9186
- 2.8734
- 2.7699
- 2.9454

HP12C	*HP10bII+*
F, CLX, F, X>Y	END MODE
G, END	SHIFT, **C ALL**
1000 **Enter** .75, **X** (= 750) **CHS PV**	1000 x .75, (= 750) **+/- PV**
1000, **FV**	1000, **FV**
10 **N**	10 **N**
0, **PMT,**	0, **PMT,**
I,	**I/YR,**
Solution = 2.9186	Solution = 2.9186

Score: 0%

Question 80

Sammy invested $752 in an account earning .5% compounded quarterly. What is the value of the account at the end of 20 years, assuming the interest generated is reinvested back into the account?

- $735.48
- $831.04
- $952.65
- $604.01

HP12C	*HP10BII+*
F, CLX, F, X>Y	Shift, C ALL
$752 **CHS PV**	+/- $752 **PV**
20 **Enter** 4 **X** (= 80) **N**	20 x 4 = 80 **N**
.5 **Enter** 4 **/** (= .125) **I**	.5 / 4 = .125 **I/YR**
Solve for **FV** = $831.04	Solve for **FV** = $831.04

Score: 0%

Question 81

Sebastian receives $875 from an insurance company at the beginning of each month. The insurance company has agreed to pay this amount for 4 years and earns 8% compounded monthly on the amount. Calculate the present value of this annuity.

- $36,080.62
- $36,204.23
- $36,017.15
- $36,239.03

HP12C	*HP10bII+*
G, BEG	BEGIN MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
875, **CHS PMT**	875, **+/- PMT**
8, **G, I**	8/12, (= .6667), **I/YR**
4, **G, N**	4x12, (= 48) **N**
0, **FV**	0, **FV**
PV,	**PV**,
Solution = 36,080.6183 or $36,080.62	Solution = 36,080.6183 or $36,080.62

Score: 0%

Question 82

What is the YTM of a zero coupon bond that matures in 11 years with a maturity value of $1,000, does not pay a coupon, and the current price is $900?

- .9945
- .9602
- .8763
- .9348

HP12C	*HP10bII+*
End Mode	End Mode
F, CLX, F, X>Y	SHIFT, **C ALL**
1,000, **FV**	1,000, **FV**
22, **N**	22, **N**
900 **CHS PV**	900 **+/- PV**
I,	**I/YR,**
Solution = .4801 x2 = .9602	Solution = .4801 x2 = .9602

Score: 0%

Question 83

You are considering purchasing a stock with the following returns over the last 5 years.

Year 1 45%
Year 2 11%
Year 3 66%
Year 4 33%
Year 5 12%
What is the standard deviation of the stock's returns?

- 23.22
- 23.13
- 23.87
- 23.45

HP12C	***HP10BII+***
F, CLX, F, X>Y	SHIFT, **C ALL**
45 **Σ+**	45 **Σ+**
11 **Σ+**	11 **Σ+**
66 **Σ+**	66 **Σ+**
33 **Σ+**	33 **Σ+**
12 **Σ+**	12 **Σ+**
G S = 23.22	SHIFT SxSy = 23.22

Score: 0%

Question 84

Ruby wants to save for a new car in 3 years. She expects it to cost roughly $20,000 at the time of purchase. How much must she deposit today in order to have enough to purchase the car if she earns 4% on her investments and she will take a loan of $2,000 at the time of purchase?

- 15,458.31
- 15,209.00
- 15,779.93
- 16,001.93

Reduce the target goal by $2,000 since the loan will be taken out at the time of purchase.

HP12C	HP10bII+
F, CLX, F, X>Y	SHIFT, C ALL
$18,000 FV	$18,000 FV
4, I	4, I/YR
3, N	3, N

Solve for PV = 16,001.93

Solve for PV = 16,001.93

Score: 100%

Question 85

Morgan took out a car loan for $37,000. If she pays $1216.88 a month at the **beginning** of the month and her loan interest is 4%, how many **years** will it take her to pay off the loan?

- 2.743
- 2.379
- 2.973
- 2.666

*Note that the rule of thumb for loan repayment calculations is to be in END mode. However, if the question specifically says otherwise you should do what the question says.

HP12C
G, BEG
F, CLX, F, X>Y
1216.88, **CHS PMT**
4 **g**, **I**
37,000 **PV**
0, **FV**
N
Solution = 32 / 12 = 2.666

HP10bII+
BEGIN MODE
SHIFT, **C ALL**
1216.88, **+/- PMT**
4/12=.3333, **I/YR**
37,000 **PV**
0, **FV**
N
Solution = 32 / 12 = 2.666

Score: 100%

Question 86

Theodore plans to travel the world and live off his inheritance of $1,000,000 for the next 25 years. He expects to earn 3% compounded annually on his account. What lump sum can he withdraw at the beginning of each year and still have enough to last him for his full trip?

- $57,427.87
- $55,755.22
- $55,198.34
- $57,287.32

HP12C
G, BEG
F, CLX, F, X>Y
3, **I**
25, **N**
1,000,000 **PV**,
PMT

HP10bII+
BEGIN MODE
SHIFT, **C ALL**
3, **I/YR**
25, **N**
1,000,000 **PV**,
PMT

Solution = $55,755.22

Solution = $55,755.22

Score: 0%

Question 87

Shelly plans to attend a university in 3 years that will have a total cost of $50,000. What amount must she deposit today in order to have enough to make full payment on the first day of school if she earns 7% on her investments.

- 40,374.92
- 40,814.89
- 40,952.21
- 40,840.99

HP12C

F, CLX, F, X>Y

$50,000 **FV**

7, **I**

3, **N**

PV,

Solution = 40,814.89

HP10bII+

SHIFT, **C ALL**

$50,000 **FV**

7, **I/YR**

3, **N**

PV,

Solution = 40,814.89

Score: 0%

Question 88

Ona inherited $25,000 from her grandfather. She plans to invest the money for the next 50 years and believes she will earn 7% annually after tax. How much will her earnings be at the end of **40 years**?

- $374,361.45
- $374,934.12
- $374,485.90
- $374,123.43

HP12C

F, CLX, F, X>Y

$25,0000,000 **CHS PV**

40 **N**

7 **I**

Solve for **FV** = $374,361.45

HP10BII+

Shift, C ALL

+/- $25,000 PV

40 N

7 I/YR

Solve for FV = $374,361.45

Score: 0%

Question 89

What is the YTM of a bond that matures in 10 years with a maturity value of $1,000, pays a 2% coupon (paid semi-annually), and the current price is $1050?

- 1.8902
- 1.7702
- 1.3402
- 1.4608

HP12C	*HP10bII+*
End Mode	End Mode
F, CLX, F, X>Y	SHIFT, **C ALL**
1,000, **FV**	1,000, **FV**
20, **N**	20, **N**
10, **PMT,**	10, **PMT,**
1050 **CHS PV**	1050 **+/- PV**
I,	**I/YR,**
Solution = .7304 x2 = 1.4608	Solution = .7304 x2 = 1.4608

Score: 100%

Question 90

Steve borrowed $65,000 from his mother for the down payment on a house. He paid her back $70,000 at the end of 10 years. What was the average annual compound interest rate on Steve's loan to his mother?

- .856
- .7438
- .675
- .955

HP12C	*HP10bII+*
F, CLX, F, X>Y	END MODE
G, END	SHIFT, **C ALL**
65,000, **CHS PV**	65,000, **+/- PV**
70,000, **FV**	70,000, **FV**
10, **N**	10, **N**
0, **PMT,**	0, **PMT,**
I,	**I/YR,**
Solution = .7438	Solution = .7438

Score: 0%

Question 91

Your client is thinking about purchasing a house in a nearby neighborhood. Recent homes in the area have sold for the following amounts. What is the standard deviation of home prices in the area?

$600,000
$615,000
$585,000
$630,000
$560,000

- 27,347.02
- 27,093.78
- 27,064.74
- 27,238.99

HP12C	***HP10BII+***
F, CLX, F, X>Y	SHIFT, **C ALL**
600,000 **Σ+**	600,000 **Σ+**
615,000 **Σ+**	615,000 **Σ+**
585,000 **Σ+**	585,000 **Σ+**
630,000 **Σ+**	630,000 **Σ+**
560,000 **Σ+**	560,000 **Σ+**
G S = 27,064.74	SHIFT SxSy = **27,064.74**

Score: 0%

Question 92

In the early 1980s the average inflation rate was 13.5%. If your portfolio averaged 7% in that time frame what would be your real rate of return?

- -5.7
- 5.7
- 4.2
- -4.2

1.07 / 1.135 = (.943-1)x100 = -5.7%

Score: 0%

Question 93

Marybeth wants to save for a new car in 8 years. She expects it to cost roughly $75,000 at the time of purchase. How much must she deposit today in order to have enough to purchase the car if she earns 11.5% on her investments and she already has $10,000

saved?

- 21,498.12
- 21,872.33
- 21,342.90
- 21,395.13

HP12C
F, CLX, F, X>Y
$75,000 FV
11.5, I
8, N
PV,
Solution = 31,395.13 – 10,000 = 21,395.13

HP10bII+
SHIFT, C ALL
$75,000 FV
11.5, I/YR
8, N
PV,
Solution = 31,395.13 – 10,000 = 21,395.13

Score: 100%

Question 94

Bobby wants to purchase a new boat in 3 years for $12,000. If his account earns a 12% return, what payment will he have to make at the beginning of each month to save for his boat?

- $265.81
- $275.81
- $345.81
- $299.81

HP12C
Begin Mode
F, CLX, F, X>Y
3 **enter** 12 / = 36, **N**
12 **enter** 12/ = 1 **I**
12,000 **FV**
PMT
Solution = 275.81

HP10BII+
Begin Mode
SHIFT, **C ALL**
3x12=36, **N**
12/12=1 **I**
12,000 **FV**
PMT
Solution = 275.81

Score: 0%

Question 95

Scott has $875,000 in his IRA and plans to take distributions at the beginning of each year for the next 20 years. He expects to earn 6.5% on compounded annually. What will be the amount of each distribution?

- $79,321.87
- $79,411.85
- $74,565.11
- $74,489.17

HP12C	*HP10bII+*
G, BEG	BEGIN MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
875,000, **CHS PV**	875,000, **+/- PV**
6.5, **I**	6.5, **I/YR**
20, **N**	20, **N**
0, **FV**	0, **FV**
PMT,	**PMT,**
Solution = $74,565.11	Solution = $74,565.11

Score: 0%

Question 96

Veronica, a client who is age 45, wants to plan to retire at age 65 and is ready to commit to begin a dedicated retirement savings plan. Her current income is $50,000 per year and expects her income to increase 3% per year. She wants to assume an income replacement goal of 70% of current income, in today's dollars. She wants to assume a life expectancy of age 95 and is comfortable assuming a pre and post-retirement rate of return of 10% per year. What amount must Veronica save at the end of each year until age 65 to accomplish her retirement funding goal?

- $14,500.60
- $14,931.15
- $12,653.50
- $13,659.50

HP12c STEP 1:	**HP10bii+ STEP 1:**
End mode	End mode
F, CLX, F, X>Y	[Shift][C ALL]
50000 **ENTER** .70 **X CHS PV**	50000 x .70 = 35000 [+/-] **PV**
20 **N**	20 **N**
3 **i**	3 **I/YR**
FV	**FV**
63,213.89	63,213.89
HP12c STEP 2:	**HP10bii+ STEP 2:**
Begin mode	Begin mode
63,213.89 **PMT**	63,213.89 **PMT**

30 **N**

10 **ENTER** 3 - **ENTER** 1.03 ÷ **i**

PV

-855,181.71

HP12c STEP 3:

End Mode

855,181.71 **CHS FV**

20 **N**

10 **I**

PMT

14,931.15

30 **N**

(10 – 3) ÷ 1.03 = 6.7961 **I/YR**

PV

-855,181.71

HP10bii+ STEP 3:

End Mode

-855,181.71 **FV**

20 **N**

10 **I/YR**

PMT

14,931.15

Score: 100%

Question 97

Kade invested $350,000 in an account earning 15% compounded quarterly. What is the value of the account at the end of 10 years, assuming the interest generated is reinvested back into the account?

- $1,784,384.90
- $1,526,132.57
- $1,513,903.12
- $1,598,093.00

HP12C

F, CLX, F, X>Y

$350,000 **CHS PV**

10 **Enter** 4 **X** (= 40) **N**

15 **Enter** 4 **/** (= 3.75) **I**

Solve for **FV** = $1,526,132.57

HP10BII+

Shift, C ALL

+/- $350,000 PV

10 x 4 = 40 N

15 / 4 = 3.75 I/YR

Solve for FV = $1,526,132.57

Score: 0%

Question 98

Brian recently purchased a house for $625,000. His down payment was 20% of the purchase price, and he borrowed the remaining 80% with a 15-year, fixed rate mortgage. The interest-rate was 4.75%. How much will Brian's monthly mortgage payment be?

- $3,759.22
- $3,889.16
- $3,873.83

◉ $3,814.90

HP12C	*HP10bII+*
F, CLX, F, X>Y	END MODE
G, END	SHIFT, **C ALL**
625,000 **Enter** .8, **X** (= 500,000) **CHS PV**	625,000 x .8, (= 500,000) **+/- PV**
15 **G N**	15x12, (= 180), **N**
4.75 **G I,**	4.75/12, (= .3958) **I/YR,**
0, **FV**	0, **FV**
PMT,	**PMT,**
Solution = $3889.16	Solution = $3889.16

Score: 0%

Question 99

Miranda receives semiannual bonuses worth $7500 from her job, paid at the beginning and middle of each year. She does not need the bonuses for living expenses and has been investing them for the past 7 years in a taxable brokerage account. How much is in her account if the investments have returned 14.35% compounded semiannually?

○ $183,345.12
○ $183,527.72
○ $183,274.02
◉ $183,489.90

HP12C	*HP10bII+*
G, BEG	BEGIN MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
7500, **CHS PMT**	7500, **+/- PMT**
14.35 **Enter** 2 **/**, (= 7.1750), **I**	14.35/2, (= 7.1750), **I/YR**
7 **Enter** 2 **X**, (= 14), **N**	7x2, (= 14), **N**
FV,	**FV**,
Solution = 183,527.7175 or $183,527.72	Solution = 183,527.7175 or $183,527.72

Score: 0%

Question 100

A client would like to know **the monthly payment** on their mortgage. They just borrowed $275,000 at a fixed rate of 3.00%, compounded monthly, for 30 years.

○ $657.41
○ $1,259.41

- $1,000
- $1,159.41

HP12C	*HP10bII+*
F, CLX, F, X>Y	END MODE
G, END	SHIFT, **C ALL**
$275,000 **CHS PV**	$275,000 **+/- PV**
30 **G N**	30x12, (= 360), **N**
3 **G I,**	3/12, (= .25) **I/YR,**
PMT,	**PMT,**
Solution = $1,159.41	Solution = $1,159.41

Score: 100%

Question 101

Your client is thinking about purchasing a house in a nearby neighborhood. Recent homes in the area have sold for the following amounts. What is the standard deviation of home prices in the area?

$2,500,000
$2,600,000
$2,550,000
$2,400,000
$2,900,000

- 188,414.44
- 188,394.21
- 188,498.14
- 188,658.32

HP12C	***HP10BII+***
F, CLX, F, X>Y	SHIFT, **C ALL**
2,500,000 **Σ+**	2,500,000 **Σ+**
2,600,000 **Σ+**	2,600,000 **Σ+**
2,550,000 **Σ+**	2,550,000 **Σ+**
2,400,000 **Σ+**	2,400,000 **Σ+**
2,900,000 **Σ+**	2,900,000 **Σ+**
G S = 188,414.44	SHIFT SxSy = **188,414.44**

Score: 0%

Question 102

Henry has successfully petitioned a state court to grant him his share of a family estate previously held in Probate. The court awarded Henry a sum of $1,000,000 and he now plans to withdraw equal monthly amounts for the next 18 months to fund a lavish lifestyle. If he can earn 10% compounded monthly on the lump sum, how much will he be able to withdraw at the beginning of each month?

- $59,560.58
- $59,789.23
- $59,345.17
- $59,465.78

HP12C	*HP10bII+*
G, BEG	BEGIN MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
1,000,000, **CHS PV**	1,000,000, **+/- PV**
10, **G I**	10/12, (= .8333) **I/YR**
18, **N**	18, **N**
0, **FV**	0, **FV**
PMT,	**PMT,**
Solution = $59,560.58	Solution = $59,560.58

Score: 0%

Question 103

Sean won $25,000,000 from the lottery. He plans to invest the money for the next 5 years and believes he will earn 7% annually after tax. How much will his earnings be at the end of **2 years**?

- $28,589,932
- $28,622,500
- $28,254,102
- $28,722,569

HP12C	*HP10BII+*
F, CLX, F, X>Y	Shift, C ALL
$25,0000,000 **CHS PV**	+/- $25,0000,000 PV
2 **N**	2 **N**
7 **I**	7 I/YR
Solve for **FV** = $28,622,500	Solve for FV = $28,622,500

Score: 0%

Question 104

Hilda wants to save for a new car in 5 years. She expects it to cost roughly $100,000 at the time of purchase. How much must she deposit today in order to have enough to purchase the car if she earns 4.5% on her investments and she already has $30,000 saved?

- 50,245.11
- 50,187.32
- 50,094.11
- 50,872.89

HP12C	HP10bII+
F, CLX, F, X>Y	SHIFT, C ALL
$100,000 FV	$100,000 FV
4.5, I	4.5, I/YR
5, N	5, N
PV,	PV,
Solution = 80,245.11 – 30,000 = 50,245.11	Solution = 80,245.11 – 30,000 = 50,245.11

Score: 0%

Question 105

Grace has a mint condition 1984 Michael Jordan Rookie card currently valued at $650,000. She believes the card will appreciate in value at a rate of 4.5% per year for the next 5 years. How much will the card be worth in 5 years?

- $810,018.26
- $906,350.00
- $860,805.60
- $795,900.72

10BII+	HP12C
END MODE	G, END
SHIFT, **C ALL**	F, CLX, F, X>Y
650,000, **+/- PV**	650,000, **CHS PV**
4.5, **I/YR**	4.5, **I**
5, **N**	5, **N**
FV,	**FV**,
Solution = $810,018.26	Solution = $810,018.26

Score: 0%

Question 106

BDS, Inc has just signed a 5-year lease to rent office space. The monthly lease payment is $15,000, due at the beginning of each month. Rather than pay monthly rent to the landlord, BDS, Inc would prefer to deposit the entire amount of rental payments into an account which pays 5% compounded monthly. How much would need to be deposited in order fund the entire lease agreement?

- $798,347.93
- $798,172.51
- $798,783.87
- $798,341.02

HP12C	*HP10bII+*
G, BEG	BEGIN MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
15,000, **CHS PMT**	15,000, **+/- PMT**
5, **G**, **I**	5/12, (= .4167) **I/YR**
5, **G**, **N**	5x12, (= 60), **N**
0, **FV**	0, **FV**
PV	**PV**
Solution = 798,172.514 or $798,172.51	Solution = 798,172.514 or $798,172.51

Score: 0%

Question 107

Bill has decided to save for his daughter's wedding in 10 years. Bill puts $7,000 into a highly speculative account on the last day of each year. How much will his account be worth if he achieves 35% growth on his investments?

- $398,482.73
- $374,923.00
- $382,131.12
- $368,093.54

HP12C	*HP10bII+*
G, END	END MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
7,000 **CHS PMT**	7,000, **+/- PMT**
35 **I**	35 **I/YR**
10 **N**	10 **N**
FV,	**FV**,
Solution = $382,131.12	Solution = $382,131.12

Score: 0%

Question 108

Ona inherited $25,000 from her grandfather. She plans to invest the money for the next 50 years and believes she will earn 7% annually after tax. How much will her earnings be at the end of **30 years**?

- $190,409.13
- $190,547.34
- $190,306.38
- $190,223.45

HP12C

F, CLX, F, X>Y

$25,0000,000 **CHS PV**
30 **N**
7 **I**
Solve for **FV** = $190,306.38

HP10BII+

Shift, C ALL

+/- $25,000 PV
30 N
7 I/YR
Solve for FV = $190,306.38

Score: 0%

Question 109

Bryant took out a $2,500,000 loan from his local credit union. He has to pay back $187,659.43 every quarter on the first of the month at the **beginning** of each quarter. How many **years** will it take him to pay off the loan if the credit union charges him a 7% interest rate?

- 3.75
- 3.28
- 3.45
- 3.88

*Note that the rule of thumb for loan repayment calculations is to be in END mode. However, if the question specifically says otherwise you should do what the question says.

HP12C
G, BEG
F, CLX, F, X>Y
187,659.43, **CHS PMT**
7 **enter** 4 **/**, **I**
2,500,000 **PV**
0, **FV**
N
Solution = 15/4 = 3.75

HP10bII+
BEGIN MODE
SHIFT, **C ALL**
187,659.43, **+/- PMT**
7/4= 1.75, **I/YR**
2,500,000 **PV**
0, **FV**
N
Solution = 15/4 = 3.75

Score: 0%

Question 110

Ken won $25,000 from the lottery. He plans to invest the money for the next 15 years and believes he will earn 6% annually after tax. How much will his earnings be at the end of 15 years?

- $59,913.96
- $61,658.55
- $62,699.14
- $48,658.55

HP12C	*HP10BII+*
F, CLX, F, X>Y	Shift, C ALL
$25,0000 **CHS PV**	+/- $25,0000 PV
15 **N**	15 N
6 **I**	6 I/YR
Solve for **FV** = $59,913.96	Solve for FV = $59,913.96

Score: 0%

Question 111

Ian wants to make systematic annual gifts of $15,000 to each of his five grandchildren over the next 10 years at the beginning of each year. He expects to earn 6% compounded annually on his investment and wants to have $125,000 remaining at the end of the 10 years. What amount should be deposited today to reach this goal?

- $654,893.32
- $654,689.23
- $648,094.98
- 654,926.27

HP12C	*HP10bII+*
G, BEG	BEGIN MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
75000 (15000 x 5), **CHS PMT**	75000 (15000 x 5), **+/- PMT**
6, **I**	6, **I/YR**
10, **N**	10, **N**
125000, **CHS FV**	125000, **+/- FV**
PV	**PV**

Solution = 654,926.27

Solution = 654,926.27

Score: 100%

Question 112

Patel received $65,000 from an Inheritance. She plans to invest the money and believes she will earn 7.444% annually after tax. How many years will it take her to save $100,000?

- 4
- 6
- 8
- 3

HP12C
F, CLX, F, X>Y
$65,0000 **CHS PV**
7.444 **I**
100,000 **FV**
Solve for **N = 6**

HP10BII+
Shift, C ALL
+/- $65,0000 **PV**
7.444 **I/YR**
100,000 **FV**
Solve for **N = 6**

Score: 0%

Question 113

Michael wants to start a business in 7 years. Michael contributes $17,000 into a savings account on the last day of each year. How much of a return must he achieve if the business will cost $200,000 in startup costs?

- 16.3465
- 16.7825
- 16.9799
- 16.8214

HP12C
G, END
F, CLX, F, X>Y
17,000 **CHS PMT**
7 **N**
200,000 **FV**
I
Solution = 16.9799

HP10bII+
END MODE
SHIFT, **C ALL**
17,000, **+/- PMT**
7 **N**
200,000 **FV**
I
Solution = 16.9799

Score: 0%

Question 114

What is the intrinsic value of a bond that matures in 10 years with a maturity value of $1,100, does not pay a coupon, and market rates for comparable bonds are 3%?

- $823.43
- $816.72
- $834.09
- $825.17

HP12C
F, CLX, F, X>Y
1,100, **FV**
20, **N**
0, **PMT,**
1.5, **I,**
PV
Solution = -816.72

HP10bII+
SHIFT, **C ALL**
1,100, **FV**
20, **N**
0, **PMT,**
1.5, **I/YR,**
PV
Solution = -816.72

Score: 0%

Question 115

Sam has received an inheritance worth $2,500,000. She wants to withdraw equal periodic payments at the end of each month for the next 50 years. She expects to earn 13% compounded monthly. How much will each monthly payment be?

- $27,458.61
- $27,304.15
- $27,892.98
- $27,124.74

HP12C
G, END
F, CLX, F, X>Y
2,500,000 **CHS PV**
13, **G I**
50, **G N**
0, **FV**
PMT,
Solution = 27,124.73948 or $27,124.74

HP10bII+
End MODE
SHIFT, **C ALL**
2,500,000 **+/- PV**
13/12, (= 1.0833) **I/YR**
50x12 (= 600), **N**
0, **FV**
PMT,
Solution = 27,124.73948 or $27,124.74

Score: 100%

Question 116

You have decided to focus your stock portfolio on tech companies. You purchased five of the leading companies one year ago and have just received their twelve-month results. What is the standard deviation of your portfolio returns?

GOOG	5%
APPL	89.9%
SHOP	55.6%
MSFT	75.2%
UBER	3.6%

- 41.17%
- 35.87%
- 39.85%
- 34.54%

HP12C	***HP10BII+***
F, CLX, F, X>Y	SHIFT, **C ALL**
5 **Σ+**	5 **Σ+**
89.9 **Σ+**	89.9 **Σ+**
55.6 **Σ+**	55.6 **Σ+**
75.2 **Σ+**	75.2 **Σ+**
3.6 **Σ+**	3.6 **Σ+**
G S = 39.85%	SHIFT SxSy = **39.85%**

Score: 0%

Question 117

Grace has a 1st edition Charizard Pokemon card currently valued at $300,000. She believes the card will appreciate in value at a rate of 4.5% per year for the next 10 years. How much will the card be worth in 10 years?

- $465,890.83
- $439,696.63
- $498,000
- $495,353.23

HP12C	*HP10BII+*
F, CLX, F, X>Y	Shift, C ALL
$300,000 **CHS PV**	+/- $300,000 PV
10 **N**	10 N

4.5 **I**

4.5 I/YR

Solve for **FV** = $465,890.83

Solve for FV = $465,890.83

Score: 0%

Question 118

What is the intrinsic value of a bond that matures in 10 years with a maturity value of $1,200, does not pay a coupon, and market rates for comparable bonds are 8%?

- $547.66
- $587.22
- $523.19
- $528.32

HP12C

F, CLX, F, X>Y

1,200, **FV**

20, **N**

0, **PMT,**

4, **I,**

PV

Solution = -547.66

HP10bII+

SHIFT, **C ALL**

1,200, **FV**

20, **N**

0, **PMT,**

4, **I/YR,**

PV

Solution = -547.66

Score: 0%

Question 119

Your client is deciding between two investments. Investment A was purchased for $100 and paid $5 in dividends before being sold for $150. While investment B was purchased for $200 and paid $5 of dividends before being sold for $300. Which investment had the better Holding Period Return?

- Investment A
- Investment B

Investment

Score: 0%

Question 120

The CFO of Mega Corporation, Inc. will invest $80,000 at the beginning of each year for the next 7 years in a fund paying 9% compounded annually. What is the value of this investment at the end of 7 years?

- $802,542.16
- $802,745.89
- $802,277.90
- $802,235.45

HP12C

G, END

F, CLX, F, X>Y

80000, **CHS PMT**

9, **I**

7, **N**

FV,

Solution = 802,277.9031 or $802,277.90

HP10bII+

END MODE

SHIFT, **C ALL**

80000, **+/- PMT**

9, **I/YR**

7, **N**

FV,

Solution = 802,277.9031 or $802,277.90

Score: 0%

Question 121

What is the Arithmetic Average of a fund that over the last 7 years that has experienced the following annual returns?

Year 1 12%

Year 2 10%

Year 3 7%

Year 4 13%

Year 5 (- 6%)

Year 6 (- 2%)

Year 7 4%

- 5.429
- 5.862
- 5.125
- 5.605

12 + 10 + 7 + 13 – 6 – 2 + 4 = 38 / 7 = 5.429

Score: 0%

Question 122

Susan invested $10,000 in an account earning 4.9818% compounded quarterly. How many years will it take her to double her money?

- 15
- 19
- 14
- 18

HP12C	10BII+
G, END	END MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
10,000 **CHS PV**	10,000 **+/- PV**
4.9818 ENTER 4 **/** (= 1.2454), **I**	4.9818/4 (= 1.2454), **I/YR**
20,000 **FV**,	20,000 **FV**,
Solve for **N** = 56/4 = **14**	Solve for **N** = 56/4 = **14**

Score: 0%

Question 123

123, Inc has just signed a 5-year lease to rent office space. The monthly lease payment is $1000, due at the beginning of each month. Rather than pay monthly rent to the landlord, 123, Inc would prefer to deposit the entire amount of rental payments into an account which pays 5% compounded monthly. How much would need to be deposited in order fund the entire lease agreement?

- $53,189.12
- $53,211.50
- $53,348.12
- $53,193.99

HP12C	*HP10bII+*
G, BEG	BEGIN MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
1000, **CHS PMT**	1000, **+/- PMT**
5, **G**, **I**	5/12, (= .4167) **I/YR**
5, **G**, **N**	5x12, (= 60), **N**

0, **FV**	0, **FV**
PV	**PV**
Solution = 53,211.5009 or $53,211.50	Solution = 53,211.5009 or $53,211.50

Score: 0%

Question 124

Thomas just signed a contract with a professional soccer team and was awarded a $1,000,000 bonus. Thomas plans to invest the money and withdraw equal payments at the beginning of each month to gift to his family for the next 6 years. If he can earn 5.5% compounded monthly, how much can he withdraw each month?

- $16.398.23
- $16,235.18
- $16,263.35
- $16,412.04

HP12C	*HP10bII+*
G, BEG	BEGIN MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
1,000,000, **CHS PV**	1,000,000, **+/- PV**
5.5, **G, I**	5.5/12, (= .4583) **I/YR**
6 **G, N**	6x12 (= 72), **N**
0, **FV**	0, **FV**
PMT,	**PMT,**
Solution = $16,263.35	Solution = $16,263.35

Score: 0%

Question 125

Winston plans to travel the world and live off his inheritance of $65,000 for the next 6 years. He expects to earn 11% compounded annually on his account. What lump sum can Patrick withdraw at the beginning of each year and still have enough to last him for his full trip?

- $13,875.90
- $15,432.66
- $13,841.87
- $15,364.48

HP12C	*HP10bII+*
G, BEG	BEGIN MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
11, **I**	11, **I/YR**
6, **N**	6, **N**
65,000 **PV**,	65,000 **PV**,
PMT	**PMT**
Solution = $13,841.87	Solution = $13,841.87

Score: 0%

Question 126

Alyssa is nearing retirement and has been interested in purchasing an annuity. She'd like to be able to withdraw $12,000 at the beginning of each year for the next 22 years. She expects to earn 9% compounded annually on the investment. What lump sum should Alyssa deposit in order to meet this need?

- $123,506.93
- $123,489.32
- $123,984.15
- $123,756.87

HP12C	*HP10bII+*
G, BEG	BEGIN MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
12000, **CHS PMT**	12000, **+/- PMT**
9, **I**	9, **I/YR**
22, **N**	22, **N**
0, **FV**	0, **FV**
PV	**PV**
Solution = 123,506.9248 or $123,506.93	Solution = 123,506.9248 or $123,506.93

Score: 0%

Question 127

Avery purchased a particular digital currency in 2011 for $2. Ten years later Austin sold the currency for $61,000. What is the average annual compound rate of return on Austin's investment?

- 180.8213
- 183.4963
- 184.9458
- 180.5256

HP12C
F, CLX, F, X>Y
G, END
2, **CHS PV**
61,000, **FV**
10, **N**
0, **PMT,**
I,
Solution = 180.8213

HP10bII+
END MODE
SHIFT, **C ALL**
2, **+/- PV**
61,000, **FV**
10, **N**
0, **PMT,**
I/YR,
Solution = 180.8213

Score: 0%

Question 128

Seth wants to purchase his dream house in 2 years. He expects it to cost roughly $270,000 at the time of purchase. How much must he deposit today in order to have enough to purchase the house if he earns 14% on his investments and he has $20,000 already saved?

- 187,698.33
- 187,756.23
- 187,905.14
- 187,587.29

HP12C
F, CLX, F, X>Y
$270,000 FV
14, I
2, N
PV,
Solution = 207,756.23 – 20,000 = 187,756.23

HP10bII+
SHIFT, C ALL
$270,000 FV
14, I/YR
2, N
PV,
Solution = 207,756.23 – 20,000 = 187,756.23

Score: 0%

Question 129

Grace has a mint condition 1986 Bo Jackson Rookie Baseball card currently valued at $65,000. She believes the card will appreciate in value at a rate of 4.5% per year for the next 25 years. How much will the card be worth in 25 years?

- $195,217.34
- $195,353.24
- $195,983.20
- $195,378.32

HP12C
F, CLX, F, X>Y

HP10BII+
Shift, C ALL

$65,000 **CHS PV**	+/- $65,000 PV
25 **N**	25 N
5 **I**	5 I/YR
Solve for **FV** = $195,353.24	Solve for FV = $195,353.24

Score: 0%

Question 130

Sebastian receives a monthly payment of $5,125 from an insurance company on the 1st of each month. The insurance company has agreed to pay this amount for 4 years and earns 8% compounded monthly on the amount. Calculate the present value of this annuity.

- $276,3784.23
- $211,329.34
- $136,0932.23
- $306,7329.12

HP12C	*HP10bII+*
G, BEG	BEGIN MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
5125, **CHS PMT**	5125, **+/- PMT**
8, **G**, **I**	8/12, (= .6667), **I/YR**
4, **G, N**	4x12, (= 48) **N**
0, **FV**	0, **FV**
PV,	**PV**,
Solution =211,329.34	Solution = 211,329.34

Score: 0%

Question 131

13 years ago, Sophia purchased a round lot of JDJ, Inc. Common Stock for $1.55 per share. Today Sophia sold the lot for $9500. What was Sophia's average annual compound rate of return on her investment?

- 38.6663
- 37.2435
- 38.5021
- 36.6389

HP12C	*HP10bII+*
F, CLX, F, X>Y	END MODE

G, END	SHIFT, **C ALL**
1.55 **Enter** 100, **X** (= 155) **CHS PV**	1.55 x 100, (= 155) **+/- PV**
9500, **FV**	9500, **FV**
13, **N**	13, **N**
0, **PMT,**	0, **PMT,**
I,	**I/YR,**
Solution = 37.2435	Solution = 37.2435

Score: 0%

Question 132

Matt wants to purchase his dream house in 7 years. He expects it to cost roughly $400,000 at the time of purchase. How much must he deposit today in order to have enough to purchase the house if he earns 9% on his investments and he already has $60,000 saved?

- 158,374.93
- 158,937.23
- 158,813.70
- 158,409.15

HP12C	*HP10bII+*
F, CLX, F, X>Y	SHIFT, **C ALL**
$400,000 **FV**	$400,000 **FV**
9, **I**	9, **I/YR**
7, **N**	7, **N**
PV,	**PV**,
Solution = 218,813.70 – 60,000 = 158,813.70	Solution = 218,813.70 – 60,000 = 158,813.70

Score: 0%

Question 133

Melissa is nearing retirement and has been interested in purchasing an annuity. She'd like to be able to withdraw $22,000 at the beginning of each year for the next 25 years. She expects to earn 9% compounded annually on the investment. What lump sum should Melissa deposit in order to meet this need?

- $235,893.09

- $235,478.34
- $235,545.46
- $235,582.29

HP12C	*HP10bII+*
G, BEG	BEGIN MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
22000, **CHS PMT**	22000, **+/- PMT**
9, **I**	9, **I/YR**
25, **N**	25, **N**
0, **FV**	0, **FV**
PV	**PV**
Solution = 235,545.4589 or $235,545.46	Solution = 235,545.4589 or $235,545.46

Score: 0%

Question 134

Samantha's parents purchased a vacation home some time ago for $490,523.97. She is able to sell the house today for $3,000,000. How many years ago did her parents buy the property if it appreciated at a rate of 10% per year?

- 22
- 15
- 19
- 27

HP12C	*HP10bII+*
F, CLX, F, X>Y	END MODE
G, END	SHIFT, **C ALL**
490,523.97, **CHS PV**	490,523.97, **+/- PV**
3,000,000, **FV**	3,000,000, **FV**
10 **I,**	10 **I/YR,**
Solve for **N** = 19	Solve for **N** = 19

Score: 0%

Question 135

Beth took out a car loan for $50,000. If she pays $887.96 a month, at the **beginning** of the month, and her loan interest is 5%, how many **years** will it take her to pay off the loan?

- 5.983
- 5.333
- 5.273

5.374

*Note that the rule of thumb for loan repayment calculations is to be in END mode. However, if the question specifically says otherwise you should do what the question says.

HP12C	*HP10bII+*
G, BEG	BEGIN MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
887.96, **CHS PMT**	887.96, **+/- PMT**
5 **g**, **I**	5/12=.4166, **I/YR**
50,000 **PV**	50,000 **PV**
0, **FV**	0, **FV**
N	**N**
Solution = 64 / 12 = 5.333	Solution = 64 / 12 = 5.333

Score: 0%

Question 136

Kendall needs to take out $6000 from an investment account at the beginning of each year for the next 8 years. He expects to earn 9% compounded annually in his account. What lump sum must be deposited in order to withdraw this amount?

- $36,197.72
- $36,174.32
- $36,121.93
- $36,118,12

HP12C	*HP10bII+*
G, BEG	BEGIN MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
6000, **CHS PMT** (since this is a cash out flow, enter the amount as a negative number)	6000, **+/- PMT** (since this is a cash out flow, enter the amount as a negative number)
9, **I**	9, **I/YR**
8, **N**	8, **N**
PV,	**PV**,

Solution = 36,197.7170 or $36,197.72

Solution = 36,197.7170 or $36,197.72

Score: 0%

Question 137

What is the YTC of a bond that matures in 24 years with a maturity value of $1,000, pays an 8% coupon (paid semi-annually), and the current price is $1,000? The bond is callable in 7 years at a special call price of $1,100.

- 9.0544
- 9.1932
- 9.8781
- 9.3463

HP12C
End Mode
F, CLX, F, X>Y
1,100, **FV**
14, **N**
40, **PMT**
1000 **CHS PV**
I,
Solution = 4.5272 x2 = 9.0544

HP10bII+
End Mode
SHIFT, **C ALL**
1,100, **FV**
14, **N**
40, **PMT**
1000 **+/- PV**
I/YR,
Solution = 4.5272 x2 = 9.0544

Score: 0%

Question 138

Yoni wants to purchase his dream house in 5 years. He expects it to cost roughly $170,000 at the time of purchase. How much must he deposit today in order to have enough to purchase the house if he earns 4% on his investments and he has $9,000 saved already?

- 130,384.98
- 130,509.23
- 130,690.19
- 130,727.61

HP12C
F, CLX, F, X>Y
$170,000 FV
4, I
5, N
PV,
Solution = 139,727.61 – 9,000 = 130,727.61

HP10bII+
SHIFT, C ALL
$170,000 FV
4, I/YR
5, N
PV,
Solution = 139,727.61 – 9,000 = 130,727.61

Score: 100%

Question 139

17 years ago, Astra purchased a round lot of ZXY, Inc. Common Stock for $12.50 per share. Today Astra sold the lot for $8500. What was Astra's average annual compound rate of return on her investment?

- 11.9363
- 11.7895
- 10.4584
- 12.9674

HP12C	*HP10bII+*
F, CLX, F, X>Y	END MODE
G, END	SHIFT, **C ALL**
12.50 **Enter** 100, **X** (= 1250) **CHS PV**	12.50 x 100, (= 1250) **+/- PV**
8500, **FV**	8500, **FV**
17, **N**	17, **N**
0, **PMT,**	0, **PMT,**
I,	**I/YR,**
Solution = 11.9363	Solution = 11.9363

Score: 0%

Question 140

Elijah borrowed $80,000 from his mother for the down payment on a house. He paid her back $90,000 at the end of 10 years. What was the average annual compound interest rate on Elijah's loan to his mother?

- 1.8284
- 1.1848
- 1.8374
- 1.8234

HP12C	*HP10bII+*
F, CLX, F, X>Y	END MODE
G, END	SHIFT, **C ALL**
80,000, **CHS PV**	80,000, **+/- PV**
90,000, **FV**	90,000, **FV**
10, **N**	10, **N**
0, **PMT,**	0, **PMT,**
I,	**I/YR,**

Solution = 1.1848

Solution = 1.1848

Score: 0%

Question 141

Donna purchased a particular digital currency in 2011 for $2. Ten years later Donna sold the currency for $111,000. What is the average annual compound rate of return on Donna's investment?

- 115.8374
- 122.8532
- 119.8931
- 198.1462

HP12C
F, CLX, F, X>Y
G, END
2, **CHS PV**
61,000, **FV**
10, **N**
0, **PMT,**
I,
Solution = 198.1462

HP10bII+
END MODE
SHIFT, **C ALL**
2, **+/- PV**
111,000, **FV**
10, **N**
0, **PMT,**
I/YR,
Solution = 198.1462

Score: 100%

Question 142

Jack took out a $50,004.87 loan from his rich uncle. He has to pay back $500 every quarter on the first of the month. How many **years** will it take him to pay off the loan if his uncle charges him a 2% interest rate?

- 34.7
- 34.5
- 33.2
- 33.9

HP12C
G, BEG
F, CLX, F, X>Y
500, **CHS PMT**
2 **enter** 4 **/**, **I**
50,004.87 **PV**
0, **FV**
N
Solution = 138 / 4 = 34.5

HP10bII+
BEGIN MODE
SHIFT, **C ALL**
500, **+/- PMT**
2/4=.5, **I/YR**
50,004.87 **PV**
0, **FV**
N
Solution = 138 / 4 = 34.5

Score: 0%

Question 143

Xavier took a $5000 loan from his grandfather in order to make a charitable donation. He paid back $3500 to his grandfather after a four-year period. What is the average annual compound rate on Xavier's loan?

- -8.5469
- -8.5309
- -8.6873
- -8.9732

HP12C	*HP10bII+*
F, CLX, F, X>Y	END MODE
G, END	SHIFT, **C ALL**
5000, **CHS PV**	5000, **+/- PV**
3500, **FV**	3500, **FV**
4, **N**	4, **N**
0, **PMT,**	0, **PMT,**
I,	**I/YR,**
Solution = -8.5309	Solution = -8.5309

Score: 0%

Question 144

Bailey pays $1200 in rent each month. Her mother wants to fund an entire year of rental payments for Bailey. How much would her mother need to deposit if she can earn 9% compounded monthly on her gift to Bailey?

- $13,824.81
- $13,754.12
- $13,983.80
- $13,754.34

HP12C	*HP10bII+*
G, BEG	BEGIN MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
1200, **CHS PMT**	1200, **+/- PMT**
9 **G**, **I**	9/12, (= .7500) **I/YR**
1 **G**, **N**	12, **N**
0, **FV**,	0, **FV**,
PV	**PV**
Solution = $13,824.81	Solution = $13,824.81

Score: 0%

Question 145

Calista wants to save for a new car in 3 years. She expects it to cost roughly $65,000 at the time of purchase. How much must she deposit today in order to have enough to purchase the car if she earns 7.5% on her investments and she already has $15,000 saved?

- 37,387.23
- 37,322.44
- 37,315.21
- 37,398.09

HP12C
F, CLX, F, X>Y
$65,000 FV
7.5, I
3, N
PV,
Solution = 52,322.44 – 15,000 = 37,322.44

HP10bII+
SHIFT, C ALL
$65,000 FV
7.5, I/YR
3, N
PV,
Solution = 52,322.44 – 15,000 = 37,322.44

Score: 0%

Question 146

Your client is worried about how inflation will impact their portfolio and their ability to pay for their future goals. If they are averaging 9% return on their portfolio and inflation is expected to average 4% over the next 10 years, what is their real rate of return?

- 4.81
- 6
- 3.08
- 4.57

1.09 / 1.04 = (1.0481 -1) x100 = 4.81%

Score: 0%

Question 147

Kurt has just won the lottery worth $2,000,000. He elects to receive equal payments at the beginning of each month for the next 20 years and he anticipates earning 7% compounded monthly. What will be the value of his monthly winnings?

- $15,416.05
- $15,489.23
- $15,390.89
- $15,265.78

HP12C	*HP10bII+*
G, BEG	BEGIN MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
2,000,000, **CHS PV**	2,000,000, **+/- PV**
7, **G, I**	7/12, (= .5833) **I/YR**
20, **G, N**	20x12 (240), **N**
0, **FV**	0, **FV**
PMT,	**PMT,**
Solution = $15,416.05	Solution = $15,416.05

Score: 0%

Question 148

Shelby received $5,000 from an Inheritance. She plans to invest the money and believes she will earn 6.8838% annually after tax. How many years will it take her to save $100,000?

- 47
- 59
- 45
- 52

HP12C	*HP10BII+*
F, CLX, F, X>Y	Shift, C ALL
$5,000 **CHS PV**	+/- $5,000 **PV**
6.8838 **I**	6.8838**I/YR**
100,000 **FV**	100,000 **FV**
Solve for **N = 45**	Solve for **N = 45**

Score: 0%

Question 149

Logan has $975,000 in his IRA and plans to take minimum distributions at the beginning of each year for the next 10 years. He expects to earn 8.5% compounded annually. What will be the amount of each distribution?

- $136,956.23
- $136,369.90
- $136,198.25
- $136,784.78

HP12C	*HP10bII+*
G, BEG	BEGIN MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
975,000, **CHS PV**	975,000, **+/- PV**
8.5, **I**	8.5, **I/YR**
10, **N**	10, **N**
0, **FV**	0, **FV**
PMT,	**PMT,**
Solution = $136,956.23	Solution = $136,956.23

Score: 0%

Question 150

Mal, 16, works part time at a fast-food restaurant. He has been saving $150 at the beginning of each month for the last 2 years to help pay for college. He puts the money in an investment account that has earned 7% compounded monthly. How much is in the account at the end of 2 years?

- $3,562.21
- $3,189.90
- $3,874.63
- $3,745.65

HP12C	*HP10bII+*
G, BEG	BEGIN MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
150, **CHS PMT**	150, **+/- PMT**
7, **G, I**	7/12, (= .58333) **I/YR**
2, **G, N**	2x12, (= 24), **N**
FV,	**FV**,
Solution = 3,874.6256 or $3,874.63	Solution = 3,874.6256 or $3,874.63

Score: 0%

Question 151

Sam lent his daughter Gwen $9,000 to purchase a used car. Gwen paid back $12,500 to her father at the end of 5 years. What was average annual interest rate that Gwen paid on the loan?

- 6.79
- 5.89
- 5.56
- 6.35

HP12C	*HP10bII+*
F, CLX, F, X>Y	END MODE
G, END	SHIFT, **C ALL**
9,000, **CHS PV**	9,000, **+/- PV**
12,500, **FV**	12,500, **FV**
5, **N**	5, **N**
0, **PMT,**	0, **PMT,**
I	**I/YR,**
Solution = 6.79	Solution = 6.79

Score: 0%

Question 152

John has decided to save for his child's 18th birthday in 11 years. John contributes $11,000 into a UTMA on the last day of each year. How much will the account be worth if he achieves 11% growth on his investments?

- $215,735.90
- $215,273.34
- $215,139.15
- $215,175.73

HP12C	*HP10bII+*
G, END	END MODE

F, CLX, F, X>Y	SHIFT, **C ALL**
11,000 **CHS PMT**	11,000, **+/- PMT**
11 **I**	11 **I/YR**
11 **N**	11 **N**
FV,	**FV**,
Solution = $215,175.73	Solution = $215,175.73

Score: 100%

Question 153

Jed wants to buy a motorcycle, but he must borrow the money from his mother. Jed's mom lends him $5000 for the purchase, but requires that he pay her back a lump sum amount of $6000 at the end of two years. What is the average annual compound rate of interest on Jed's private loan?

- 9.3678
- 9.4509
- 9.5445
- 9.0765

HP12C	*HP10bII+*
F, CLX, F, X>Y	END MODE
G, END	SHIFT, **C ALL**
5,000, **CHS PV**	5,000, **+/- PV**
6,000 **FV**	6,000 **FV**
2, **N**	2, **N**
0, **PMT,**	0, **PMT,**
I,	**I/YR,**
Solution = 9.5445	Solution = 9.5445

Score: 0%

Question 154

What is the future value of a $1000 monthly annuity, beginning today and continuing for 15 years? The guaranteed interest rate of the annuity is 8%.

- $348,542.10
- $348,964.09
- $348,345.14
- $348,215.98

HP12C	*HP10bII+*
G, BEG	BEGIN MODE
F, CLX, F, X>Y	SHIFT, **C ALL**

1000, **CHS PMT**	1000, **+/- PMT**
8 **G, I**	8/12, (= .6667), **I/YR**
15 **G, N**	15x12, (= 180) **N**
FV,	**FV**,
Solution = 348,345.1431 or $348,345.14	Solution = 348,345.1431 or $348,345.14

Score: 0%

Question 155

Mary took out a car loan for $12,000. If she pays $595.50 a month at the **beginning** of the month and her loan interest is 5%, how many months will it take her to pay off the loan?

- 21
- 19
- 17
- 27

*Note that the rule of thumb for loan repayment calculations is to be in END mode. However, if the question specifically says otherwise you should do what the question says.

HP12C	*HP10bII+*
G, BEG	BEGIN MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
595.50, **CHS PMT**	595.50, **+/- PMT**
5 **g, I**	5/12=.4166, **I/YR**
12,000 **PV**	12,000 **PV**
0, **FV**	0, **FV**
N	**N**
Solution = 21	Solution = 21

Score: 0%

Question 156

Your client is deciding between two investments. Investment A was purchased for $80 and paid $12 in dividends before being sold for $90. While investment B was purchased for $200 and paid $20 of dividends before being sold for $250. Which investment had the better Holding Period Return?

- Investment A
- Investment B

$$Investment\ \ A\ \ =\ \ \frac{12+(90-80)}{80}\ \ =27.5\,\%\ Investment\ \ B\ \ =\ \ \frac{20+(250-200)}{200}=35\,\%$$

Score: 100%

Question 157

Tim purchased a CD from his local bank 10 years ago for $2000. The CD matures today, and he is owed $2750. If the CD's interest rate compounds monthly, what is the average annual compound rate of return?

- 3.1888
- 3.2555
- 3.8697
- 3.4872

HP12C
F, CLX, F, X>Y
G, END
2,000, **CHS PV**
2,750 **FV**
10 **G N**
0, **PMT,**
I,
Solution = .2657 **Enter** 12 **X** = 3.1888

HP10bII+
END MODE
SHIFT, **C ALL**
2,000, **+/- PV**
2,750 **FV**
10x12, (=120) **N**
0, **PMT,**
I/YR,
Solution = .2657x12 = 3.1888

Score: 0%

Question 158

Vander received $35,000 from an Inheritance. He plans to invest the money and believes he will earn 7.855% annually after tax. How many years will it take him to save $250,000?

- 26
- 24
- 28
- 21

HP12C
F, CLX, F, X>Y
$35,000 **CHS PV**
7.855 **I**
250,000 **FV**
Solve for **N = 26**

HP10BII+
Shift, C ALL
+/- $35,000 **PV**
7.855 **I/YR**
250,000 **FV**
Solve for **N = 26**

Score: 0%

Question 159

Big Riggs, LLC has decided to purchase 10 new trucks directly from a manufacturer for $1,000,000. Big Riggs has agreed to pay the manufacturer $125,000 at the **beginning** of each year with an agreed-upon interest rate of 5.3446%. How many years will it take them to pay off the trucks?

- 15
- 9
- 13
- 10

*Note that the rule of thumb for loan repayment calculations is to be in END mode. However, if the question specifically says otherwise you should do what the question says.

HP12C
G, BEG
F, CLX, F, X>Y
125000, **CHS PMT**
5.3446, **I**
1,000,000 **PV**
0, **FV**
N
Solution = 10

HP10bII+
BEGIN MODE
SHIFT, **C ALL**
125000, **+/- PMT**
5.3446, **I/YR**
1,000,000 **PV**
0, **FV**
N
Solution = 10

Score: 100%

Question 160

Ray purchased a CD from his local bank 20 years ago for $4000. The CD matures today, and he is owed $5500. If the CD's interest rate compounds monthly, what is the average annual compound rate of return?

- 1.4826
- 1.5933
- 1.5452
- 1.5898

HP12C
F, CLX, F, X>Y
G, END
4,000, **CHS PV**
5,500 **FV**
20 **Enter** 12, **X** (=240) **N**
0, **PMT,**
I,
Solution = .1328 **Enter** 12 **X** = 1.5933

HP10bII+
END MODE
SHIFT, **C ALL**
4,000, **+/- PV**
5,500 **FV**
20x12, (=240) **N**
0, **PMT,**
I/YR,
Solution = .1328x12 = 1.5933

Score: 0%

Question 161

What is the Geometric Return of a fund that over the last 7 years that has experienced the following annual returns?

Year 1 12%

Year 2 10%

Year 3 7%

Year 4 13%

Year 5 (- 6%)

Year 6 (- 2%)

Year 7 4%

- 5.62
- 5.21
- 5.16
- 5.93

HP12C

1.12 **ENTER** 1.10 × 1.07 × 1.13 × .94 × .98 × 1.04 × 7 **1/x** **y^x** 1 -

= .0521 or 5.21%

HP10BII+

1.12 × 1.10 × 1.07 × 1.13 × .94 × .98 × 1.04 **y^x** 7 **1/x** **y^x** -1

= .0521 or 5.21%

Score: 0%

Question 162

Anthony is self-employed and has decided to save for his retirement in 60 years. Anthony contributes $6,000 into an IRA on the last day of each year. How much of a return must Anthony achieve if he wants to retire with $3.5 million dollars?

- 6.2151
- 6.1525
- 6.8763
- 6.4563

HP12C	*HP10bII+*
G, END	END MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
6,000 **CHS PMT**	6,000, **+/- PMT**
60 **N**	60 **N**

3,500,000 **FV**,	3,500,000 **FV**,
I	I
Solution = 6.2151	Solution = 6.2151

Score: 0%

Question 163

XYZ corporation has committed to pay ABC, Inc $250,000 at the beginning of each year for the next 10 years in a licensing deal. How much must XYZ deposit today, assuming an interest rate of 8% compounded annually, if it wants to meet its annual obligation?

- $1,811,721.98
- $1,834,469.24
- $1,790,874.50
- $1,825,587.12

HP12C	*HP10bII+*
G, BEG	BEGIN MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
250000, **CHS PMT**	250000, **+/- PMT**
8, **I**	8, **I/YR**
10, **N**	10, **N**
0, FV,	**0, FV**,
PV	**PV**
Solution = 1,811,721.9777 or $1,811,721.98	Solution = 1,811,721.9777 or $1,811,721.98

Score: 0%

Question 164

Big Riggs, LLC has decided to purchase 10 new trucks directly from a manufacturer. Big Riggs has agreed to pay the manufacturer $125,000 at the **beginning** of each year for the next 7 years with an agreed-upon interest rate of 4%. What is the present value of these payments?

- $780,349.34
- $780,287.99
- $780,267.11
- $780,315.43

*Note that the rule of thumb for loan repayment calculations is to be in END mode. However, if the question specifically says otherwise you should do what the question says.

HP12C	*HP10bII+*
G, BEG	BEGIN MODE
F, CLX, F, X>Y	SHIFT, **C ALL**

125000, **CHS PMT**	125000, **+/- PMT**
4, **I**	4, **I/YR**
7, **N**	7, **N**
0, **FV**	0, **FV**
PV	**PV**
Solution = 780,267.1071 or $780,267.11	Solution = 780,267.1071 or $780,267.11

Score: 0%

Question 165

You have decided to focus your stock portfolio on video game companies. You purchased five of the leading companies one year ago and have just received their twelve-month results. What is the standard deviation of the stocks in your portfolio?

ATVI	-2%
NTDOY	2%
ESPO	-6%
MSFT	4%
SONY	1%

- 3.87%
- 3.24%
- 3.90%
- 3.22%

HP12C	***HP10BII+***
F, CLX, F, X>Y	SHIFT, **C ALL**
2 **CHS Σ+**	2 +/- **Σ+**
2 **Σ+**	2 **Σ+**
6 **CHS Σ+**	6 +/- **Σ+**
4 **Σ+**	4 **Σ+**
1 **Σ+**	1 **Σ+**
G S = 3.90%	SHIFT SxSy = **3.90%**

Score: 0%

Question 166

Ronald invested $2,000,000 in an account earning 8.7588% compounded quarterly. How long will it take him to double his money?

- 3
- 4
- 8

- (•) 9

HP12C
G, END
F, CLX, F, X>Y
2,000,000 **CHS PV**
8.7588 ENTER 4 **/** (= 2.1897), **I**
4,000,000 **FV**,
Solve for **N** = 32/4 = **8**

10BII+
END MODE
SHIFT, **C ALL**
2,000,000 **+/- PV**
8.7588/4 (= 2.1897), **I/YR**
4,000,000 **FV**,
Solve for **N** = 32/4 = **8**

Score: 0%

Question 167

Your client buys IBM stock for $70. One year later IBM has paid $20 in dividends and your client decides to sell when the stock is at $130. Calculate your client's Holding Period Return.

- ( ) 114%
- ( ) 120%
- ( ) 116%
- (•) 118%

$\frac{20 + (130 - 70)}{70} = 114\,\%$

Score: 0%

Question 168

What is the Future Value of a monthly annuity of $50 beginning today and continuing for 50 years if the annual earnings rate is 5%?

- ( ) $133,988.57
- ( ) $133,538.93
- ( ) $133,129.12
- (•) $133,783.75

HP12C

G, BEG

F, CLX, F, X>Y

HP10bII+

BEGIN MODE

SHIFT, **C ALL**

50, **CHS PMT**	50, **+/- PMT**
5 **G**, **I**	5/12, (= .4167), **I/YR**
50 **G, N**	50x12, (= 600), **N**
FV,	**FV**,
Solution = 133,988.5677	Solution = 133,988.5677

Score: 0%

Question 169

Johnny, a client who is age 25, wants to plan to retire at age 65 and is ready to commit to begin a dedicated retirement savings plan. His current income is $150,000 per year and expects his income to increase 3% per year. He wants to assume an income replacement goal of 70% of current income, in today's dollars. He wants to assume a life expectancy of age 95 and is comfortable assuming a pre and post-retirement rate of return of 10% per year. What amount must Johnny save at the end of each year until age 65 to accomplish his retirement funding goal?

- $9,460.60
- $9,600.58
- $10,956.60
- $10,469.36

HP12c STEP 1:	**HP10bii+ STEP 1:**
End mode	End mode
F, CLX, F, X>Y	[Shift][C ALL]
150000 **ENTER** .70 **X CHS PV**	150000 x .70 = 105,000 [+/-] **PV**
40 **N**	40 **N**
3 **i**	3 **I/YR**
FV	**FV**
342,513.97	342,513.97
HP12c STEP 2:	**HP10bii+ STEP 2:**
Begin mode	Begin mode
342,513.96 **PMT**	342,513.96 **PMT**
30 **N**	30 **N**
10 **ENTER** 3 - **ENTER** 1.03 ÷ **i**	(10 – 3) ÷ 1.03 = 6.7961 **I/YR**

PV

-4,633,660.03

HP12c STEP 3:
End Mode
4,633,660.03 **FV**
40 **N**
10 **I**
PMT
-10,469.36

PV

-4,633,660.03

HP10bii+ STEP 3:
End Mode
4,633,660.03 **FV**
40 **N**
10 **I/YR**
PMT
-10,469.36

Score: 100%

Question 170

What is the YTM of a zero coupon bond that matures in 8 years with a maturity value of $1,000, does not pay a coupon, and the current price is $600?

- 6.4883
- 6.3245
- 6.2262
- 6.5812

HP12C

End Mode
F, CLX, F, X>Y
1,000, **FV**
16, **N**
600 **CHS PV**
I,
Solution = 3.2442 x2 = 6.4883

HP10bII+

End Mode
SHIFT, **C ALL**
1,000, **FV**
16, **N**
600 **+/- PV**
I/YR,
Solution = 3.2442 x2 = 6.4883

Score: 0%

Question 171

Austin purchased a particular digital currency in 2011 for $32. Ten years later Austin sold the currency for $61,000. What is the average annual compound rate of return on Austin's investment?

- 111.8432
- 112.6789
- 112.8227
- 112.7903

HP12C	*HP10bII+*
F, CLX, F, X>Y	END MODE
G, END	SHIFT, **C ALL**
32, **CHS PV**	32, **+/- PV**
61,000, **FV**	61,000, **FV**
10, **N**	10, **N**
0, **PMT,**	0, **PMT,**
I,	**I/YR,**
Solution = 112.8227	Solution = 112.8227

Score: 0%

Question 172

Jackie pays $1500 in rent each month. Her grandmother wants to fund an entire year of rental payments for Jackie. How much would her grandmother need to deposit if she can earn 9% compounded monthly on her gift to Jackie?

- $17,159.98
- $17,281.01
- $17,783.23
- $17,699.98

HP12C	*HP10bII+*
G, BEG	BEGIN MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
1500, **CHS PMT**	1500, **+/- PMT**
9 **G, I**	9/12, (= .7500) **I/YR**
1 **G, N**	12, **N**
0, **FV,**	0, **FV,**
PV	**PV**
Solution = 17,281.0118 or $17,281.01	Solution = 17,281.0118 or $17,281.01

Score: 0%

Question 173

Anthony is self-employed and has decided to save for his retirement in 60 years. Anthony contributes $6,000 into an IRA on the last day of each year. How much will his retirement account be worth if he achieves 6% growth on his investments?

- $3,974,238.32
- $3,198,769.09
- $3,274,843.99
- $3,108,083.15

HP12C	*HP10bII+*
G, END	END MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
6,000 **CHS PMT**	6,000, **+/- PMT**
6 **I**	6 **I/YR**
60 **N**	60 **N**
FV,	**FV**,
Solution = $3,198,769.09	Solution = $3,198,769.09

Score: 0%

Question 174

Jillian has been saving $4,000 at the beginning of each year for the past 8 years to start a business. How much is in the account assuming the account earned 10.25% compounded annually?

- $50,124.98
- $50,892.46
- $50,734.98
- $50,489.12

HP12C	*HP10bII+*
G, BEG	BEGIN MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
4000, **CHS PMT**	4000, **+/- PMT**
10.25, **I**	10.25, **I/YR**
8, **N**	8, **N**
FV,	**FV**,
Solution = 50,892.4579 or $50,892.46	Solution = 50,892.4579 or $50,892.46

Score: 0%

Question 175

Ona inherited $25,000 from her grandfather. She plans to invest the money for the next 50 years and believes she will earn 7% annually after tax. How much will her earnings be at the end of **20 years**?

- $96,742.11
- $96,403.32
- $96,190.13
- $96,384.45

HP12C	*HP10BII+*

F, CLX, F, X>Y	Shift, C ALL
$25,0000,000 **CHS PV**	+/- $25,000 PV
20 **N**	20 N
7 **I**	7 I/YR
Solve for **FV** = $96,742.11	Solve for FV = $96,742.11

Score: 0%

Question 176

Steve recently bought a new condo for $875,000. he made a down payment of only 10% and obtained a 30-year loan with an interest rate of 2.5%. How much is Steve's monthly payment?

- $3,238.12
- $3,290.31
- $3,111.58
- $3,178.45

HP12C	*HP10bII+*
F, CLX, F, X>Y	END MODE
G, END	SHIFT, **C ALL**
875,000 **Enter** .9, **X** (= 787,500), **CHS PV**	875,000 x .9, (= 787,500), **+/- PV**
0, **FV**	0, **FV**
30 **G N**	30x12, (= 360) **N**
2.5 **G I,**	2.5 / 12, (= .2083) **I/YR,**
PMT,	**PMT,**
Solution = $3,111.58	Solution = $3,111.58

Score: 0%

Question 177

Jay was just given an interest-free, forgivable loan of $115,000 from his wealthy uncle for a frozen banana stand. He plans to make equal, quarterly withdrawals for the next 7 years to fund ongoing expenses and can earn 5% compounded quarterly. How much will Jay withdraw at the beginning of every quarter?

- $4,458.90
- $4,562.12
- $4,893.09
- $4,832.68

HP12C	*HP10bII+*
G, BEG	BEGIN MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
115,000, **CHS PV**	115,000, **+/- PV**
5 **Enter** 4, **/** (= 1.2500) **I** 7 **Enter** 4, **X** (=28), **N** 0, **FV** **PMT,** Solution = $4,832.68	5/4, (= 1.2500) **I/YR** 7x4 (=28), **N** 0, **FV** **PMT,** Solution = $4,832.68

Score: 100%

Question 178

Becca invested $100,000 in an account earning 2.9924% compounded quarterly. How many years will it take her to double her money?

- 23.89
- 23.73
- 23.25
- 23.43

HP12C	10BII+
G, END	END MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
100,000 **CHS PV**	100,000 **+/- PV**
2.9924 ENTER 4 **/** (= .7481), **I**	2.9924/4 (= .7481), **I/YR**
200,000 **FV**,	200,000 **FV**,
Solve for **N** = 93/4 = **23.25**	Solve for **N** = 93/4 = **23.25**

Score: 0%

Question 179

Lucy plans to attend a university in 20 years that will have a total cost of $200,000. What amount must she deposit today in order to have enough to make full payment on the first day of school if she earns 2% on her investments.

- 134,594.27
- 134,480.32
- 134,758.11
- 134,973.81

HP12C	*HP10bII+*
F, CLX, F, X>Y	SHIFT, **C ALL**
$200,000 **FV**	$200,000 **FV**
2, **I**	2, **I/YR**
20, **N**	20, **N**
PV,	**PV**,
Solution = 134,594.27	Solution = 134,594.27

Score: 0%

Question 180

What is the YTM of a bond that matures in 5 years with a maturity value of $1,000, pays a 7% coupon (paid semi-annually), and the current price is $850?

- 10.65
- 10.98
- 10.79
- 10.12

HP12C	*HP10bII+*
End Mode	End Mode
F, CLX, F, X>Y	SHIFT, **C ALL**
1,000, **FV**	1,000, **FV**
10, **N**	10, **N**
35, **PMT,**	35, **PMT,**
850 **CHS PV**	850 **+/- PV**
I,	**I/YR,**
Solution = 5.489 x2 = 10.98n	Solution = 5.489 x2 = 10.98

Score: 0%

Question 181

Kiki owns an annuity which pays $11,500 each year for 9 years. The annual payment is made at the beginning of each year and when Ava receives each annuity payment, she deposits it into a brokerage account which pays 5.75% interest compounded annually. How much does Kiki have at the end of 9 years?

- $138,214.10
- $138,654.89
- $138,925.34
- $138,311.24

HP12C	*HP10bII+*
G, BEG	BEGIN MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
11,500, **CHS PMT**	11,500, **+/- PMT**
5.75, **I**	5.75, **I/YR**
9, **N**	9, **N**
FV,	**FV**,
Solution = 138,311.2369 or $138,311.24	Solution = 138,311.2369 or $138,311.24

Score: 100%

Question 182

Jed, 15, works part time at a fast-food restaurant. He has been saving $350 at the beginning of each month for the last 3 years to help pay for college. He puts the money in an investment account that has earned 7.5% compounded monthly. How much is in the account at the end of the 3 years?

- $14,215.87
- $14,168.99
- $14,289.15
- $14,319,34

HP12C	*HP10bII+*
G, BEG	BEGIN MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
350, **CHS PMT**	350, **+/- PMT**
7.5, **G, I**	7.5/12, (= .6250) **I/YR**
3, **G, N**	3x12, (= 36), **N**
FV,	**FV**,
Solution = 14,168.9897 or $14,168.99	Solution = 14,168.9897 or $14,168.99

Score: 0%

Question 183

In the early 1960s the average inflation rate was 1.72%. If your portfolio average 7% in that time frame what would be your real rate of return?

- 5.19
- 4.20
- 5.56
- 30.06

1.07 / 1.0172 = (1.0519 – 1) x100 = 5.19%

Score: 0%

Question 184

Your client is thinking about purchasing a plot of land in a nearby neighborhood. Recent plots in the area have sold for the following amounts. What is the standard deviation of prices in the area?

$50,000
$100,000
$45,000
$35,000
$25,000

- $29,834.23
- $29,025.85
- $29,873.21
- $29,342.42

HP12C	***HP10BII+***
F, CLX, F, X>Y	SHIFT, **C ALL**
50,000 **Σ+**	50,000 **Σ+**
100,000 **Σ+**	100,000 **Σ+**
45,000 **Σ+**	45,000 **Σ+**
35,000 **Σ+**	35,000 **Σ+**
25,000 **Σ+**	25,000 **Σ+**
G S = 29,025.85	SHIFT SxSy = **29,025.85**

Score: 0%

Question 185

Richie invested $20,000 in an account earning 7.3632% compounded quarterly. How long will it take him to double his money?

- 9.9
- 9.5
- 9.3

9.6

HP12C	10BII+
G, END	END MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
20,000 **CHS PV**	20,000 **+/- PV**
7.3632 ENTER 4 **/** (= 1.8408), **I**	7.3632/4 (= 1.8408), **I/YR**
40,000 **FV**,	40,000 **FV**,
Solve for **N** = 38/4 = **9.5**	Solve for **N** = 38/4 = **9.5**

Score: 0%

Question 186

You have decided to focus your stock portfolio on utility companies. You purchased five of the leading companies one year ago and have just received their twelve-month results. What is the standard deviation of the stocks in your portfolio?

AWK	2%
BIPC	1%
NEE	6%
KEN	7%
EDN	3%

2.34%

2.87%

2.59%

2.15%

HP12C	***HP10BII+***
F, CLX, F, X>Y	SHIFT, **C ALL**
2 **Σ+**	2 **Σ+**
1 **Σ+**	1 **Σ+**
6 **Σ+**	6 **Σ+**
7 **Σ+**	7 **Σ+**
3 **Σ+**	3 **Σ+**
G S = 2.59%	SHIFT SxSy = **2.59%**

Score: 0%

Question 187

Ava owns an annuity which pays $10,500 each year for 7 years. The annual payment is made at the beginning of each year and when Ava receives each annuity payment, she deposits it into a brokerage account which pays 6.75% interest compounded annually. How much does Ava have at the end of 7 years?

- $96,265.89
- $96,128.43
- $96,262.75
- $96,324.18

HP12C	*HP10bII+*
G, BEG	BEGIN MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
10,500, **CHS PMT**	10,500, **+/- PMT**
6.75, **I**	6.75, **I/YR**
7, **N**	7, **N**
FV,	**FV**,
Solution = 96,262.7485 or $96,262.75	Solution = 96,262.7485 or $96,262.75

Score: 0%

Question 188

Eli recently purchased a new houseboat for $400,000. His down payment was 20% of the purchase price and he borrowed the remaining 80% with a 15 year, fixed-rate mortgage. The interest rate was 2%. How much is Eli's monthly payment?

- $2,658.65
- $2,059.23
- $3,168.64
- $2,156.13

HP12C	*HP10bII+*
G, END	END MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
400,000 **Enter** .8, **X** (= 320,000) **CHS PV**	400,000 x .8, (= 320,000) **+/- PV**
15 **G**, **N**	15x12, (= 180), **N**
2 **G I,**	2/12, (= .166666) **I/YR,**
PMT,	**PMT,**
Solution = $2,059.23	Solution = $2,059.23

Score: 0%

Question 189

You have decided to focus your stock portfolio on manufacturing companies. You purchased five of the leading companies one year ago and have just received their twelve-month results. What is the standard deviation of the stocks in your portfolio?

UNP	9%
RTX	15%
HON	6%
BA	5%
DE	3%

- 4.89%
- 4.67%
- 4.75%
- 4.33%

HP12C	***HP10BII+***
F, CLX, F, X>Y	SHIFT, **C ALL**
9 **Σ+**	9 **Σ+**
15 **Σ+**	15 **Σ+**
6 **Σ+**	6 **Σ+**
5 **Σ+**	5 **Σ+**
3 **Σ+**	3 **Σ+**
G S = 4.67%	SHIFT SxSy = **4.67%**

Score: 0%

Question 190

Yorick wants to withdraw $850 on the 1st of each month from an account for the next 10 years. he also wants to have $25,000 remaining in the account at the end of the 10 years. What amount should Yorick deposit today, if he expects to earn 8% in his account?

- $81,788.40
- $69,372.98
- $79,578.24
- $89,198.45

HP12C	*HP10bII+*
G, BEG	BEGIN MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
850, **PMT**	850, **PMT**
8, **G**, **I**	8/12, (=.6667), **I/YR**
10, **G**, **N**	12x10, (= 120) **N**
25000, **FV**	25000, **FV**
PV,	**PV**,
Solution = 81,788.40	Solution = 81,788.40

Score: 0%

Question 191

Brian received $135,000 from an Inheritance. He plans to invest the money and believes he will earn 4.8833% annually after tax. How many years will it take him to save $1,000,000?

- 40
- 38
- 44
- 42

HP12C
F, CLX, F, X>Y
$135,000 **CHS PV**
4.8833 **I**
1,000,000 **FV**
Solve for **N = 42**

HP10BII+
Shift, C ALL
+/- $135,000 **PV**
4.8833**I/YR**
1,000,000 **FV**
Solve for **N = 42**

Score: 100%

Question 192

Diamond and Gold, LLC has decided to purchase 10 new drills directly from a manufacturer. D&G has agreed to pay the manufacturer $115,000 at the **beginning** of each year for the next 5 years with an agreed-upon interest rate of 2%. What is the present value of these payments?

- $552,109.56
- $552,487.23
- $552,907.99
- $552,888.80

*Note that the rule of thumb for loan repayment calculations is to be in END mode. However, if the question specifically says otherwise you should do what the question says.

HP12C
G, BEG
F, CLX, F, X>Y
115,000, **CHS PMT**
2, **I**
5, **N**
0, **FV**
PV
Solution = 552,888.8003 or $552,888.80

HP10bII+
BEGIN MODE
SHIFT, **C ALL**
115000, **+/- PMT**
2, **I/YR**
5, **N**
0, **FV**
PV
Solution = 552,888.8003 or $552,888.80

Score: 100%

Question 193

Colby lent his daughter Sasha $10,000 to start a business. Sasha paid back $15,000 to her father at the end of 5 years. What was average annual interest rate that Sasha paid on the loan?

- 8.4472
- 8.2214
- 8.9965
- 8.5782

HP12C	*HP10bII+*
F, CLX, F, X>Y	END MODE
G, END	SHIFT, **C ALL**
10,000, **CHS PV**	10,000, **+/- PV**
15,000, **FV**	15,000, **FV**
5, **N**	5, **N**
0, **PMT,**	0, **PMT,**
I	**I/YR,**
Solution = 8.4472	Solution = 8.4472

Score: 0%

Question 194

Vander received $35,000 from an Inheritance. He plans to invest the money for the next 25 years and believes he will earn 8% annually after tax. How much will his earnings be at the end of 25 years?

- $115,606.55
- $215,606.55
- $239,696.63
- $139,696.63

HP12C	*HP10BII+*
F, CLX, F, X>Y	Shift, C ALL
$35,0000 **CHS PV**	+/- $35,0000 **PV**
25 **N**	25 **N**
8 **I**	8 **I/YR**
Solve for **FV** = $239,696.63	Solve for **FV** = $239,696.63

Score: 0%

Question 195

Ashley plans to take a sabbatical and live off her savings of $15,000 for the next 2 years. She expects to earn 30% per year on her account. What lump sum can she withdraw at the beginning of each month and still have enough to last her for the full timeframe?

- $838.23
- $854.78
- $818.24
- $838.69

HP12C	*HP10bII+*
G, BEG	BEGIN MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
30/12 = 2.5, **I**	30/12 = 2.5, **I/YR**
24, **N**	24, **N**
15,000 **PV**,	15,000 **PV**,
PMT	**PMT**
Solution = $818.24	Solution = $818.24

Score: 0%

Question 196

What is the future value of a $2000 monthly annuity, beginning today, and continuing for 13 years? The guaranteed interest rate of the annuity is 2%.

- $356,189.90
- $356,359.12
- $356,572.61
- $356,456.39

HP12C	*HP10bII+*
G, BEG	BEGIN MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
2000, **CHS PMT**	2000, **+/- PMT**
2 **G, I**	2/12, (= .16667), **I/YR**
13 **G, N**	13x12, (= 156) **N**
FV,	**FV**,
Solution = $356,572.61	Solution = $356,572.61

Score: 0%

Question 197

Bobby took out a $9,000 loan from his rich uncle. He has to pay back $99.42 every quarter on the first of the month. How many **years** will it take him to pay off the loan if his uncle charges him a 2% interest rate?

- 24
- 27
- 30
- 35

HP12C
G, BEG
F, CLX, F, X>Y
99.42, **CHS PMT**
2 **enter** 4 **/**, **I**
9,000 **PV**
0, **FV**
N
Solution = 120 / 4 = 30

HP10bII+
BEGIN MODE
SHIFT, **C ALL**
99.42, **+/- PMT**
2/4=.5, **I/YR**
9,000 **PV**
0, **FV**
N
Solution = 120 / 4 = 30

Score: 0%

Question 198

XYZ corporation has committed to pay ABC, Inc $350,000 at the beginning of each year for the next 10 years in a licensing deal. How much must XYZ deposit today, assuming an interest rate of 8% compounded annually, if it wants to meet its annual obligation?

- $2,384,982.23
- $2,536,410.77
- $2,783,980.34
- $3,489,980.59

HP12C
G, BEG
F, CLX, F, X>Y
350000, **CHS PMT**
8, **I**
10, **N**
0, FV,
PV
Solution = 2,536,410.77

HP10bII+
BEGIN MODE
SHIFT, **C ALL**
350000, **+/- PMT**
8, **I/YR**
10, **N**
0, FV,
PV
Solution = 2,536,410.77

Score: 0%

Question 199

Vivian plans to take a sabbatical and live off her savings of $150,000 for the next 2 years. She expects to earn 3%on her account. What lump sum can she withdraw at the beginning of each month and still have enough to last her for the full timeframe?

- $6,246.99
- $6,431.10
- $6,447.18
- $6,523.09

HP12C	*HP10bII+*
G, BEG	BEGIN MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
3/12 = .25, **I**	3/12 = .25, **I/YR**
24, **N**	24, **N**
150,000 **PV**,	150,000 **PV**,
PMT	**PMT**
Solution = $6,431.10	Solution = $6,431.10

Score: 0%

Question 200

What is the Arithmetic Average of a fund that over the last 7 years that has experienced the following annual returns?

Year 1 1%

Year 2 19%

Year 3 17%

Year 4 14%

Year 5 (- 9%)

Year 6 (- 20%)

Year 7 40%

- 8.857
- 8.308
- 8.556

- 8.223

1 + 19 + 17 + 14 – 9 – 20 + 40 = 62 / 7 = 8.857

Score: 0%

Question 201

Layla plans to attend a university in 8 years that will have a total cost of $35,000. What amount must she deposit today in order to have enough to make full payment on the first day of school if she earns 6% on her investments?

- 21,959.43
- 21,375.33
- 21,083.45
- 21,843.13

HP12C	*HP10bII+*
F, CLX, F, X>Y	SHIFT, **C ALL**
$35,000 **FV**	$35,000 **FV**
6, **I**	6, **I/YR**
8, **N**	8, **N**
PV,	**PV**,
Solution = 21,959.43	Solution = 21,959.43

Score: 0%

Question 202

Chad plans to travel the world and live off his inheritance of $250,000 for the next 4 years. He expects to earn 5% compounded annually on his account. What lump sum can Chad withdraw at the beginning of each year and still have enough to last him for his full trip?

- $70,786.57
- $67,349.99
- 70,502.96
- $67,145.67

HP12C	*HP10bII+*
G, BEG	BEGIN MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
5, **I**	5, **I/YR**
4, **N**	4, **N**
250,000 **PV**,	250,000 **PV**,

PMT	**PMT**
Solution = $67,145.67	Solution = $67,145.67

Score: 100%

Question 203

You have decided to focus your stock portfolio on fast food companies. You purchased five of the leading companies one year ago and have just received their twelve-month results.

FRY 50%

DIP 22%

TRT -62%

TOT 48%

SHK 31%

What is the standard deviation of your portfolio returns?

- 46.42%
- 46.12%
- 46.31%
- 46.16%

HP12C	***HP10BII+***
F, CLX, F, X>Y	SHIFT, **C ALL**
50 **Σ+**	50 **Σ+**
22 **Σ+**	22 **Σ+**
62 **CHS Σ+**	62 +/- **Σ+**
48 **Σ+**	48 **Σ+**
31 **Σ+**	31 **Σ+**
G S = 46.12%	SHIFT SxSy = **46.12%**

Score: 0%

Question 204

John’s annuity will pay an annual amount of $1500 beginning today for the next 19 years. If the guaranteed interest rate of the annuity is 7.5%, what is the future value of John's annuity?

- $63,983.15
- $62,783.90
- $63,457.02
- $62,569.87

HP12C	*HP10bII+*
G, BEG	BEGIN MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
1500, **CHS PMT**	1500, **+/- PMT**
7.5, **I**	7.5, **I/YR**
19, **N**	19, **N**
FV,	**FV**,
Solution = 63,457.0220 or $63,457.02	Solution = 63,457.0220 or $63,457.02

Score: 0%

Question 205

Your client is worried about how inflation will impact their portfolio and their ability to pay for their future goals. If they are averaging 7% return on their portfolio and inflation is expected to average 18% over the next 10 years, what is their real rate of return?

- -9.3
- -8.5
- -7.5
- -10.1

1.07 / 1.18 = (.907-1)x100 = -9.3%

Score: 0%

Question 206

Bridgette plans to take a sabbatical and live off her savings of $16,450 for the next year. She expects to earn 20% compounded annually on her account. What lump sum can she withdraw at the beginning of each month and still have enough to last her for the full timeframe?

- $1,523.78
- $1,498.86
- $1,532.65
- $1,587.09

HP12C	*HP10bII+*
G, BEG	BEGIN MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
20/12 = 1.666, **I**	20/12 = 1.666, **I/YR**
12, **N**	12, **N**
16,450 **PV**,	16,450 **PV**,
PMT	**PMT**

Solution = $1,498.86

Solution = $1,498.86

Score: 0%

Question 207

Zander took a $1,000 loan from his grandfather in order to make a charitable donation. He paid back $3500 to his grandfather after a four-year period. What is the average annual compound rate on Zander's loan?

- 36.9876
- 36.2365
- 36.7782
- 36.4593

HP12C	*HP10bII+*
F, CLX, F, X>Y	END MODE
G, END	SHIFT, **C ALL**
1000, **CHS PV** 3500, **FV** 4, **N** 0, **PMT,** **I,** Solution = 36.7782	1000, **+/- PV** 3500, **FV** 4, **N** 0, **PMT,** **I/YR,** Solution = 36.7782

Score: 0%

Question 208

What is the Geometric Return of a fund that over the least 7 years that has experienced the following annual returns?

Year 1 10%

Year 2 10%

Year 3 1%

Year 4 0%

Year 5 (- 6%)

Year 6 (- 2%)

Year 7 8%

- 2
- 3
- 2.83

2.62

HP12C
1.10 **ENTER** 1.10 × 1.01 × 1 × .94 × .98 × 1.08 × 7 **1/x** **y^x** 1 -

= .0283 or 2.83%

-

HP10BII+
1.10 × 1.10 × 1.01 × 1 × .94 × .98 × 1.08 **y^x** 7 **1/x** **y^x** -1 **=**

= . 0283 or 2.83%

Score: 0%

Question 209

Percival plans to travel the world via hot air balloon and live off his inheritance of $200 for the next 7 years. He expects to earn 15% compounded annually on his account. What lump sum can Patrick withdraw at the beginning of each year and still have enough to last him for his full trip?

- $41.12
- $48.07
- $46.36
- $41.80

HP12C	*HP10bII+*
G, BEG	BEGIN MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
15, **I**	15, **I/YR**
7, **N**	7, **N**
200 **PV**,	200 **PV**,
PMT	**PMT**
Solution = $41.80	Solution = $41.80

Score: 100%

Question 210

What is the intrinsic value of a bond that matures in 5 years with a maturity value of $1,000, pays a 4% coupon (paid semi-annually), and market rates for comparable bonds are 8%?

- $837.78
- $843.21
- $835.45
- $842.19

HP12C
End Mode
F, CLX, F, X>Y
1,000, **FV**
10, **N**
20, **PMT,**
4, **I,**
PV
Solution = -837.78

HP10bII+
End Mode
SHIFT, **C ALL**
1,000, **FV**
10, **N**
20, **PMT,**
4, **I/YR,**
PV
Solution = -837.78

Score: 0%

Question 211

Harold purchased 100 shares of XYZ stock for $50 per share 2 years ago. Today Harold sold all of his shares for $30. What is the average annual compound rate of return on his investment in XYZ (excluding taxation)?

- -21.4452
- -22.9658
- -21.7852
- -22.5403

HP12C

F, CLX, F, X>Y

G, END

100 **Enter** 50 **X** (=5,000), **CHS PV**
100 **Enter** 30 **X** (= 3,000) **FV**
2, **N**
0, **PMT,**
I,
Solution = -22.5403

HP10bII+

END MODE

SHIFT, **C ALL**

100 x 50 (=5,000), **+/- PV**
100 x 30, (= 3,000) **FV**
2, **N**
0, **PMT,**
I/YR,
Solution = -22.5403

Score: 100%

Question 212

Alyssa purchased an expensive watch some time ago for $30,000. She is able to sell the watch today for $220,000. How many years ago did she buy the watch if the watch appreciated at a rate of 6.8669% per year?

- 30
- 33
- 39

42

HP12C
F, CLX, F, X>Y
G, END
30,000, **CHS PV**
220,000, **FV**
6.8669 **I,**
Solve for **N** = 30

HP10bII+
END MODE
SHIFT, **C ALL**
30,000, **+/- PV**
220,000, **FV**
6.8669 **I/YR,**
Solve for **N** = 30

Score: 0%

Question 213

In the early 1960s the average inflation rate was 1.72%. If your portfolio average 10% in that time frame what would be your real rate of return?

8.1
8.6
9.1
7.5

1.1 / 1.0172 = (1.081 – 1) x100 = 8.1%

Score: 0%

Question 214

Mac just bought a penthouse for $1,000,000. He put down 50% of the purchase price and borrowed the remainder. The bank gave Mac a 15-year loan and offered an interest rate of 2%. How much is Mac's monthly payment?

$3,154.24
$3,217.54
$3,734.43
$3,983.32

HP12C
F, CLX, F, X>Y
G, END
1,000,000 **Enter** .5, **X** (= 500,000) **CHS PV**
0, **FV**
15 **G N**
2 **G I,**
PMT,
Solution = $3,217.54

HP10bII+
END MODE
SHIFT, **C ALL**
1,00,000 x .5, (= 500,000) **+/- PV**
0, **FV**
15x12, (= 180) **N**
2 / 12, (= .1666) **I/YR,**
PMT,
Solution = $3,217.54

Score: 0%

Question 215

Rhonda wants to save for a new car in 2 years. She expects it to cost roughly $70,000 at the time of purchase. How much must she deposit today in order to have enough to purchase the car if she earns 4% on her investments and she already has $20,000 saved?

- 44,498.12
- 44,690.14
- 44,718.94
- 44,598.23

HP12C	HP10bII+
F, CLX, F, X>Y	SHIFT, C ALL
$70,000 FV	$70,000 FV
4, I	4, I/YR
2, N PV, Solution = 64,718.94 – 20,000 = 44,718.94	2, N PV, Solution = 64,718.94 – 20,000 = 44,718.94

Score: 0%

Question 216

Jillian took out a car loan for $68,790.03. If she pays $2050 a month at the **beginning** of the month and her loan interest is 3%, how many **years** will it take her to pay off the loan?

- 2.37
- 2.92
- 2.48
- 2.87

*Note that the rule of thumb for loan repayment calculations is to be in END mode. However, if the question specifically says otherwise you should do what the question says.

HP12C	*HP10bII+*
G, BEG	BEGIN MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
2050, **CHS PMT**	2050, **+/- PMT**
3 **g, I**	3/12=.25, **I/YR**
68,790.03 **PV**	68,790.03 **PV**
0, **FV**	0, **FV**

N	**N**
Solution = 35 / 12 = 2.92	Solution = 35 / 12 = 2.92

Score: 0%

Question 217

Roger was awarded a settlement from a judge worth $750,000, to be paid in a lump sum. Roger will invest this award and plans to withdraw quarterly payments for the next 19 years at the beginning of each quarter while earning 10%, compounded quarterly. What will the amount of each withdrawal be?

- $21,599.68
- $21,782.34
- $21,390.12
- $21,490.78

HP12C	*HP10bII+*
G, BEG	BEGIN MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
750,000, **CHS PV**	750,000, **+/- PV**
10 **Enter** 4, **/** (= 2.500) **I**	10/4, (= 2.500) **I/YR**
19 **Enter** 4, **x** (= 76), **N**	19x4 (= 76), **N**
0, **FV**	0, **FV**
PMT, Solution = $21,599.68	**PMT,** Solution = $21,599.68

Score: 0%

Question 218

Evan worked for 35 years as a successful surgeon and recently retired with $3,500,000. He wants to withdraw equal payments at the beginning of each month for the next 27.5 years and expects to earn 7.5% compounded monthly on his retirement savings. How much will each monthly payment be?

- $24,467.98
- $24,539.23
- $24,928.89
- $24,798.54

HP12C	*HP10bII+*
G, BEG	BEGIN MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
3,500,000, **CHS PV**	3,500,000, **+/- PV**
7.5, **G I**	7.5/12, (= .6250) **I/YR**
27.5, **G N**	27.5x12 (= 330), **N**
0, **FV**	0, **FV**
PMT,	**PMT,**
Solution = $24,928.89	Solution = $24,928.89

Score: 0%

Question 219

Carmen plans to attend a university in 9 years that will have a total cost of $500,000. What amount must she deposit today in order to have enough to make full payment on the first day of school if she earns 12% on her investments.

- 180,498.22
- 180,939.15
- 180,305.01
- 180,590.89

HP12C	*HP10bII+*
F, CLX, F, X>Y	SHIFT, **C ALL**
$500,000 **FV**	$500,000 **FV**
12, **I**	12, **I/YR**
9, **N**	9, **N**
PV,	**PV**,
Solution = 180,305.01	Solution = 180,305.01

Score: 0%

Question 220

Greg's Beard Emporium, LLC has decided to open a new store and has taken out a loan for $150,000. Greg has agreed to pay the bank $10,136.07 at the beginning of each year with an agreed-upon interest rate of 5%. How many years will it take them to pay off the store?

- 22
- 25
- 21
- 29

HP12C
G, BEG
F, CLX, F, X>Y
10,136.07, **CHS PMT**
5, **I**
150,000 **PV**
0, **FV**
N
Solution = 25

HP10bII+
BEGIN MODE
SHIFT, **C ALL**
10,136.07, **+/- PMT**
5, **I/YR**
150,000 **PV**
0, **FV**
N
Solution = 25

Score: 0%

Question 221

Harper purchased 100 shares of XYZ stock for $18.50 per share 6 years ago. Today Harper sold all of her shares for $38.75. What is the average annual compound rate of return on her investment in XYZ (excluding taxation)?

- 12.1157
- 13.368
- 13.1141
- 13.1190

HP12C
F, CLX, F, X>Y
G, END
100 **Enter** 18.50 **X** (=1850), **CHS PV**
100 **Enter** 38.75 **X** (= 3875) **FV**
6, **N**
0, **PMT,**
I,
Solution = 13.1141

HP10bII+
END MODE
SHIFT, **C ALL**
100 x 18.50 (=1850), **+/- PV**
100 x 38.75, (= 3875) **FV**
6, **N**
0, **PMT,**
I/YR,
Solution = 13.1141

Score: 0%

Question 222

Nancy took out a car loan for $17,000. If she pays $249.85 a month at the **beginning** of the month and her loan interest is 4%, how many **years** will it take her to pay off the loan?

- 6.416
- 6.382
- 6.947
- 6.743

*Note that the rule of thumb for loan repayment calculations is to be in END mode. However, if the question specifically says otherwise you should do what the question says.

HP12C	*HP10bII+*
G, BEG	BEGIN MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
249.85, **CHS PMT**	249.85, **+/- PMT**
4 **g, I**	4/12=.3333, **I/YR**
17,000 **PV**	17,000 **PV**
0, **FV**	0, **FV**
N	**N**
Solution = 77 / 12 = 6.416	Solution = 77 / 12 = 6.416

Score: 0%

Question 223

Ken has just won the lottery worth $10,000,000. He elects to receive equal payments at the beginning of each month for the next 10 years and he anticipates earning 7% compounded monthly. What will be the value of his monthly winnings?

- $116,201.14
- $115,435.11
- $115,389.90
- $116,578.31

HP12C	*HP10bII+*
G, BEG	BEGIN MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
10,000,000, **CHS PV**	10,000,000, **+/- PV**
7, **G, I**	7/12, (= .5833) **I/YR**
10, **G**, **N**	10x12 (120), **N**
0, **FV**	0, **FV**
PMT,	**PMT,**
Solution = 115,435.11	Solution = 115,435.11

Score: 0%

Question 224

Pat has a mint condition Black Lotus Magic: The Gathering card currently valued at $42,000. He believes the card will appreciate in value at a rate of 8.5% per year for the next 5 years. How much will the card be worth in 5 years?

- $63,153.58
- $95,353.23
- $39,696.63

◉ $59,913.95

HP12C	*HP10BII+*
F, CLX, F, X>Y	Shift, C ALL
$42,000 **CHS PV**	+/- $42,000 **PV**
5 **N**	5 **N**
8.5 **I**	8.5 **I/YR**
Solve for **FV** = $63,153.58	Solve for **FV** = $63,153.58

Score: 0%

Question 225

Sophie took out a car loan for $22,000. If she pays $778.40 a month at the **beginning** of the month and her loan interest is 5%, how many months will it take her to pay off the loan?

○ 28
○ 30
○ 25
◉ 33

*Note that the rule of thumb for loan repayment calculations is to be in END mode. However, if the question specifically says otherwise you should do what the question says.

HP12C	*HP10bII+*
G, BEG	BEGIN MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
778.40, **CHS PMT**	778.40, **+/- PMT**
5 **g**, **I**	5/12=.4166, **I/YR**
22,000 **PV**	22,000 **PV**
0, **FV**	0, **FV**
N	**N**
Solution = 30	Solution = 30

Score: 0%

Question 226

Wilson received $10,000 from an Inheritance. He plans to invest the money and believes he will earn 1.9875% annually after tax. How many years will it take him to save $100,000?

○ 117

- 110
- 121
- 118 (selected)

HP12C
F, CLX, F, X>Y
$10,000 **CHS PV**
1.9875 **I**
100,000 **FV**
Solve for **N = 117**

HP10BII+
Shift, C ALL
+/- $10,000 **PV**
1.9875 **I/YR**
100,000 **FV**
Solve for **N = 117**

Score: 0%

Question 227

In the early 1980s the average inflation rate was 13.5%. If your portfolio averaged 10% in that time frame what would be your real rate of return?

- -42.6
- -5.5
- -3.08
- -4.02 (selected)

1.1 / 1.135 = (.969-1)x100 = -3.08%

Score: 0%

Question 228

In the early 1980s the average inflation rate was 13.5%. If your portfolio averaged 18% in that time frame what would be your real rate of return?

- 2.3
- 6.6
- 3.9
- 5.6 (selected)

1.18 / 1.135 = (1.039 -1) x100 = 3.9%

Score: 0%

Question 229

Karen just sold her home and realized a gain of $500,000 which she deposited into an investment account. She plans to make withdrawals from the account at the beginning of each month for the next 10 years and believes she can earn a 6% return compounded monthly. How much will she be able to withdraw each month without running out of money before the 10 years is up?

- $5,678.23
- $5,431.12
- $5,523.41
- $5,683.90

HP12C	*HP10bII+*
G, BEG	BEGIN MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
500,000, **CHS PV**	500,000, **+/- PV**
6, **G I**	6/12, (= .5000) **I/YR**
10 **G**, **N**	10x12 (120), **N**
0, **FV**	0, **FV**
PMT,	**PMT,**
Solution = or $5,523.41	Solution = $5,523.41

Score: 0%

Question 230

Elijah borrowed $40,000 from his father for the down payment on a house. He paid him back $90,000 at the end of 5 years. What was the average annual compound interest rate on Elijah's loan to his father?

- 16.3487
- 19.2903
- 18.1572
- 17.6079

HP12C	*HP10bII+*
F, CLX, F, X>Y	END MODE
G, END	SHIFT, **C ALL**
40,000, **CHS PV**	40,000, **+/- PV**
90,000, **FV**	90,000, **FV**
5, **N**	5, **N**
0, **PMT,**	0, **PMT,**
I,	**I/YR,**
Solution = 17.6079	Solution = 17.6079

Score: 100%

Question 231

Mohamad recently won the lottery for $5 million dollars. Assuming he lives for another 10 years, how much can he withdraw at the beginning of each year if he earns a 2% return on his investments?

- $556,632.64
- $545,718.27
- $565,309.99
- $512,873.23

HP12C	*HP10bII+*
G, BEG	BEGIN MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
2, **I**	2, **I/YR**
10, **N**	10, **N**
5,000,000 **PV**,	5,000,000 **PV**,
PMT	**PMT**
Solution = $545,718.27	Solution = $545,718.27

Score: 0%

Question 232

13 years ago, Sophia purchased a round lot of ABC, Inc. Common Stock for $19.50 per share. Today Sophia sold the lot for $7500. What was Sophia's average annual compound rate of return on her investment?

- 10.9180
- 10.9342
- 10.9984
- 10.5093

HP12C	*HP10bII+*
F, CLX, F, X>Y	END MODE
G, END	SHIFT, **C ALL**
19.50 **Enter** 100, **X** (= 1950) **CHS PV**	19.50 x 100, (= 1950) **+/- PV**
7500, **FV**	7500, **FV**
13, **N**	13, **N**
0, **PMT,**	0, **PMT,**
I,	**I/YR,**
Solution = 10.9180	Solution = 10.9180

Score: 0%

Question 233

Remy purchased a zero-coupon bond 5 years ago for $675. The bond will mature today with a face value of $1000. The interest compounds semiannually. Calculate the average annual compound rate of return.

- 8.2492
- 8.9036
- 8.0678
- 8.0174

HP12C	*HP10bII+*
F, CLX, F, X>Y	END MODE
G, END	SHIFT, **C ALL**
675, **CHS PV**	675, **+/- PV**
1000, **FV**	1000, **FV**
5 **Enter** 2, **X** (= 10) **N**	5x2, (= 10) **N**
0, **PMT,**	0, **PMT,**
I,	**I/YR,**
Solution = 4.0087 **Enter** 2 **X** = 8.0174	Solution = 4.0087 x2 = 8.0174

Score: 100%

Question 234

Sean won $25,000,000 from the lottery. He plans to invest the money for the next 5 years and believes he will earn 7% annually after tax. How much will his earnings be at the end of **4 years**?

- $32,134,654.90
- $32,942,402.09
- $32,769,900.25
- $32,480,093.00

HP12C	*HP10BII+*
F, CLX, F, X>Y	Shift, C ALL
$25,0000,000 **CHS PV**	+/- $25,0000,000 PV
4 **N**	4 **N**
7 **I**	7 I/YR
Solve for **FV** = $32,769,900.25	Solve for **FV** = $32,769,900.25

Score: 0%

Question 235

You have decided to focus your stock portfolio on exploratory oil companies. You purchased five of the leading companies one year ago and have just received their twelve-month results:

BP 99%
OXY165%
COP66%
CVX75%
TTE 33%

What is the standard deviation of your portfolio returns over this five-year period?

- 49.31%
- 49.38%
- 49.75%
- 49.98%

HP12C	***HP10BII+***
F, CLX, F, X>Y	SHIFT, **C ALL**
99 **Σ+**	99 **Σ+**
165 **Σ+**	165 **Σ+**
66 **Σ+**	66 **Σ+**
75 **Σ+**	75 **Σ+**
33 **Σ+**	33 **Σ+**
G S = 49.31%	SHIFT SxSy = **49.31%**

Score: 0%

Question 236

Sylvia has received an inheritance worth $1,250,000. She wants to withdraw equal periodic payments at the beginning of each month for the next 25 years. She expects to earn 6.5% compounded monthly. How much will each monthly payment be?

- $8,217.34
- $8,743.78
- $8,319.17
- $8,394.62

HP12C	*HP10bII+*
G, BEG	BEGIN MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
1,250,000, **CHS PV**	1,250,000, **+/- PV**
6.5, **G I**	6.5/12, (= .5417) **I/YR**
25, **G N**	25x12 (= 300), **N**
0, **FV**	0, **FV**
PMT,	**PMT,**

Solution = $8,394.62

Solution = $8,394.62

Score: 100%

Question 237

Michael wants to start a business in 7 years. Michael contributes $17,000 into a savings account on the last day of each year. How much will his account be worth if he achieves 17% growth on his investments?

- $200,124.21
- $200,372.31
- $200,139.99
- $200,732.87

HP12C	*HP10bII+*
G, END	END MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
17,000 **CHS PMT**	17,000, **+/- PMT**
17 **I**	17 **I/YR**
7 **N**	7 **N**
FV,	**FV**,
Solution = $200,124.21	Solution = $200,124.21

Score: 0%

Question 238

Frank has decided to save for a trip around the world in 3 years. Frank contributes $30,000 into a portfolio on the last day of each year to his trip fund. What return does Frank need to make for his account be worth $100,000 at the time of his trip?

- 10.1565%
- 10.9844%
- 10.7275%
- 10.2853%

HP12C	*HP10bII+*
G, END	END MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
30,000 **CHS PMT**	30,000, **+/- PMT**
3 **N**	3 **N**
100,000 **FV**	100,000 **FV**
I,	**I**,
Solution = 10.7275%	Solution = 10.7275%

Score: 0%

Question 239

Sam decided to save for his dream home in 30 years. Sam contributes $17,000 into an account on the last day of each year. How much will his account be worth if he achieves 5% growth on his investments?

- $1,283,983.90
- $1,129,460.41
- $1,374,843.72
- $1,823,743.07

HP12C	*HP10bII+*
G, END	END MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
17,000 **CHS PMT**	17,000, **+/- PMT**
5 **I**	5 **I/YR**
30 **N**	30 **N**
FV,	**FV**,
Solution = $1,129,460.41	Solution = $1,129,460.41

Score: 0%

Question 240

Patrick plans to travel the world and live off his inheritance of $100,000 for the next 8 years. He expects to earn 9% compounded annually on his account. What lump sum can Patrick withdraw at the beginning of each year and still have enough to last him for his full trip?

- $18,067.44
- $16,575.63
- $18,287.23
- $16,199.45

HP12C	*HP10bII+*
G, BEG	BEGIN MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
9, **I**	9, **I/YR**

8, **N**	8, **N**
100,000 **PV**,	100,000 **PV**,
PMT	**PMT**
Solution = $16,575.63	Solution = $16,575.63

Score: 0%

Question 241

Karen invested $1,000 in an account earning 12.8033% compounded quarterly. How many years will it take her to double her money?

- 5.5
- 5.2
- 5.9
- 5.8

HP12C	10BII+
G, END	END MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
1,000 **CHS PV**	1,000 **+/- PV**
12.8033 ENTER 4 **/** (= 3.2008), **I**	12.8033/4 (= 3.2008), **I/YR**
2,000 **FV**,	2,000 **FV**,
Solve for **N** = 22/4 = **5.5**	Solve for **N** = 22/4 = **5.5**

Score: 0%

Question 242

Kirk purchased 100 shares of XYZ stock for $19.50 per share 3 years ago. Today Kirk sold all of his shares for $38.75. What is the average annual compound rate of return on his investment in XYZ (excluding taxation)?

- 25.7223
- 25.7455
- 24.8946
- 25.6329

HP12C	*HP10bII+*
F, CLX, F, X>Y	END MODE
G, END	SHIFT, **C ALL**

100 **Enter** 19.50 **X** (=1950), **CHS PV**	100 x 18.50 (=1950), **+/- PV**
100 **Enter** 38.75 **X** (= 3875) **FV**	100 x 38.75, (= 3875) **FV**
3, **N**	3, **N**
0, **PMT,**	0, **PMT,**
I,	**I/YR,**
Solution = 25.7223	Solution = 25.7223

Score: 0%

Question 243

Jack took out a $91,000 loan from his local credit union. He has to pay back $7,751.58 every quarter on the first of the month. How many **years** will it take him to pay off the loan if the credit union charges him a 7% interest rate?

- 3.25
- 3.98
- 3.47
- 3.84

HP12C	*HP10bII+*
G, BEG	BEGIN MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
7,751.58, **CHS PMT**	7,751.58, **+/- PMT**
7 **enter** 4 **/**, **I**	7/4= 1.75, **I/YR**
91,000 **PV**	91,000 **PV**
0, **FV**	0, **FV**
N	**N**
Solution = 13 / 4 = 3.25	Solution = 13 / 4 = 3.25

Score: 0%

Question 244

What is the YTM of a bond that matures in 5 years with a maturity value of $1,000, pays a 1% coupon (paid semi-annually), and the current price is $950?

- 2.06
- 2.12
- 2.87
- 2.02

HP12C	*HP10bII+*
End Mode	End Mode
F, CLX, F, X>Y	SHIFT, **C ALL**
1,000, **FV**	1,000, **FV**
10, **N**	10, **N**

5, **PMT,**	5, **PMT,**
950 **CHS PV**	950 **+/- PV**
I,	**I/YR,**
Solution = 1.03 x2 = 2.06	Solution = 1.03 x2 = 2.06

Score: 0%

Question 245

Linda just sold her home and realized a gain of $700,000 which she deposited into an investment account. She plans to make withdrawals from the account at the beginning of each month for the next 30 years and believes she can earn a 6% return compounded monthly. How much will she be able to withdraw each month?

- $4,215.65
- $4,587.23
- $4,315.12
- $4,175.97

HP12C	*HP10bII+*
G, BEG	BEGIN MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
700,000, **CHS PV**	700,000, **+/- PV**
6, **G I**	6/12, (= .5000) **I/YR**
30 **G N**	30x12 (360), **N**
0, **FV**	0, **FV**
PMT,	**PMT,**
Solution = 4,175.97 or $4,175.97	Solution = 4,175.97 or $4,175.97

Score: 100%

Question 246

What is the Geometric Return of a fund that over the last 7 years has experienced the following annual returns?

Year 1 6%

Year 2 6%

Year 3 6%

Year 4 (-13%)

Year 5 (- 6%)

Year 6 (- 2%)

Year 7 (-4%)

- -1.24%
- -1%
- 1.14%

-1.6%

HP12C

1.06 **ENTER** 1.06 × 1.06 × .87 × .94 × .98 × .96 × 7 **1/x** y^x 1 -

= -.0124 or -1.24%

-

HP10BII+

1.06 × 1.06 × 1.06 × .87 × .94 × .98 × .96 y^x 7 **1/x** y^x -1 **=**

= -.0124 or -1.24%

Score: 0%

Question 247

At the end of February Luisa decides to take a sabbatical and live off her savings of $250,000 for the rest of the year. She expects to earn 8% compounded annually on her account. What lump sum can she withdraw at the beginning of each month and still have enough to last her for the full timeframe?

- $25,924.87
- $25,754.11
- $25,453.96
- $25,365.70

HP12C

G, BEG

F, CLX, F, X>Y

8/12 = .6667, **I**

10, **N**

250,000 **PV**,

PMT

Solution = $25,754.11

HP10bII+

BEGIN MODE

SHIFT, **C ALL**

8/12 = .6667, **I/YR**

10, **N**

250,000 **PV**,

PMT

Solution = $25,754.11

Score: 0%

Question 248

Richie invested $19,750 in an account earning 7.5% compounded quarterly. What is the value of the account at the end of 10 years, assuming the interest generated is reinvested back into the account?

- $41,520.75
- $41,521.40
- $25,652.62

$25,632.50

10BII+	HP12C
END MODE	G, END
SHIFT, **C ALL**	F, CLX, F, X>Y
19,750, **+/- PV**	19,750, **CHS PV**
7.5/4 (= 1.875), **I/YR**	7.5 ENTER 4 **/** (= 1.875), **I**
10x4 (=40), **N**	10 ENTER 4 **X** (=40), **N**
FV,	**FV**,
Solution = $41,521.40	Solution = $41,521.40

Score: 0%

Question 249

Tom wants to make systematic annual gifts of $15,000 to each of his six grandchildren over the next 5 years at the begining of each year. He expects to earn 6% compounded annually on his investment and wants to have $150,000 remaining at the end of the 5 years. What amount should be deposited today to reach this goal?

- $489,374.93
- $513,948.23
- $589,034.45
- $689,582.04

HP12C	*HP10bII+*
G, BEG	BEGIN MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
90000 (15000 x 6), **CHS PMT**	90000 (15000 x 6), **+/- PMT**
6, **I**	6, **I/YR**
5, **N**	5, **N**
150,000, **CHS FV**	150,000, **CHS FV**
PV	**PV**
Solution = 513,948.23	Solution = 513,948.23

Score: 0%

Question 250

You are considering purchasing a stock with the following returns over the last 5 years.

Year 1	40%
Year 2	10%
Year 3	60%
Year 4	50%

Year 5 50%
What is the standard deviation of the stock's returns?

- 19.23
- 19.56
- 19.24
- 19.28

HP12C	***HP10BII+***
F, CLX, F, X>Y	SHIFT, **C ALL**
40 **Σ+**	40 **Σ+**
10 **Σ+**	10 **Σ+**
60 **Σ+**	60 **Σ+**
50 **Σ+**	50 **Σ+**
50 **Σ+**	50 **Σ+**
G S = 19.24	SHIFT SxSy = 19.24

Score: 0%

Question 251

In the early 1980s the average inflation rate was 13.5%. If your portfolio averaged 28% in that time frame what would be your real rate of return?

- 11.5
- 6.65
- 12.8
- 9.66

1.28 / 1.135 = (1.1277 -1) x100 = 12.8%

Score: 0%

Question 252

Ona inherited $25,000 from her grandfather. She plans to invest the money for the next 50 years and believes she will earn 7% annually after tax. How much will her earnings be at the end of 10 years?

- $49,178.78
- $49,900.36
- $48,256.88
- $59,573.12

HP12C	*HP10BII+*
F, CLX, F, X>Y	Shift, C ALL
$25,0000,000 **CHS PV**	+/- $25,000 PV
10 **N**	10 N
7 **I**	7 I/YR
Solve for **FV** = $49,178.78	Solve for FV = $49,178.78

Score: 0%

Question 253

Gary just signed a contract with a professional Frisbee team and was awarded a $10,000,000 bonus. Gary plans to invest the money and withdraw equal payments at the beginning of each month to gift to his family for the next 6 years. If he can earn 5.5% compounded monthly, how much can he withdraw each month?

- $163,874.29
- $162,633.47
- $163,377.00
- $162,498.90

HP12C	*HP10bII+*
G, BEG	BEGIN MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
10,000,000, **CHS PV**	10,000,000, **+/- PV**
5.5, **G I**	5.5/12, (= .4583) **I/YR**
6 **G N**	6x12 (= 72), **N**
0, **FV**	0, **FV**
PMT,	**PMT,**
Solution = $162,633.47	Solution = $162,633.47

Score: 0%

Question 254

Billy was awarded a settlement from a judge worth $250,000, to be paid in a lump sum. Billy will invest this award and plans to withdraw quarterly payments for the next 10 years at the beginning of each quarter while earning 10%, compounded quarterly. What will the amount of each withdrawal be?

- $9,723.79
- $9,959.06
- $9,716.15
- $9,978.98

HP12C	*HP10bII+*
G, BEG	BEGIN MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
250,000, **CHS PV**	250,000, **+/- PV**
10 **Enter** 4, **/** (= 2.500) **I**	10/4, (= 2.500) **I/YR**
10 **Enter** 4, **x** (= 40), **N**	10x4 (= 40), **N**
0, **FV**	0, **FV**
PMT,	**PMT,**
Solution = $9,716.15	Solution = $9,716.15

Score: 0%

Question 255

8 years ago, Karen decided to invest $550 at the end of every month into a growth mutual fund. The fund has earned an average annual rate of return of 10.5% compounded monthly. How much is in Karen's account today?

- $81,432.26
- $82,212.06
- $82,756.12
- $82,415.00

HP12C	*HP10bII+*
G, END	END MODE

F, CLX, F, X>Y

550, **CHS PMT** (since this is a cash out flow, enter the amount as a negative number)

10.5, **G, I**

8, **G, N**

FV,

Solution = 82,212.05797 or $82,212.06

SHIFT, **C ALL**

550, **+/- PMT** (since this is a cash out flow, enter the amount as a negative number)

10.5/12, (= .875) **I/YR**

8x12, (= 96) **N**

FV,

Solution = 82,212.05797 or $82,212.06

Score: 0%

Question 256

What is the intrinsic value of a bond that matures in 10 years with a maturity value of $1,000, pays a 5% coupon (paid semi-annually), and market rates for comparable bonds are 4%?

- $1049.40
- $1081.76
- $1083.23
- $1047.09

HP12C
End Mode
F, CLX, F, X>Y
1,000, **FV**
20, **N**
25, **PMT,**
2, **I,**
PV
Solution = -1081.76

HP10bII+
End Mode
SHIFT, **C ALL**
1,000, **FV**
20, **N**
25, **PMT,**
2, **I/YR,**
PV
Solution = -1081.76

Score: 0%

Question 257

At the end of September Lois decides to take a sabbatical and live off her savings of $5,000 for the rest of the year. She expects to earn 8% compounded annually on her account. What lump sum can she withdraw at the beginning of each month and still have enough to last her for the full timeframe?

- $1,754.99
- $1,677.75
- $1,688.94
- $1,609.99

HP12C	*HP10bII+*
G, BEG	BEGIN MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
8/12 = .6667, **I** 3, **N** 5,000 **PV**, **PMT** Solution = $1,677.75	8/12 = .6667, **I/YR** 3, **N** 5,000 **PV**, **PMT** Solution = $1,677.75

Score: 0%

Question 258

Sergey, a client who is age 30, wants to plan to retire at age 62 and is ready to commit to begin a dedicated retirement savings plan. His current income is $100,000 per year and expects his income to increase 3% per year. He wants to assume an income replacement goal of 70% of current income, in today's dollars. He wants to assume a life expectancy of age 95 and is comfortable assuming a pre and post-retirement rate of return of 10% per year. What amount must Sergey save at the end of each year until age 62 to accomplish his retirement funding goal?

- $12,474.57
- $13,650.25
- $11,500.32
- $16,550.69

HP12c STEP 1:	**HP10bii+ STEP 1:**
End mode	End mode
F, CLX, F, X>Y	[Shift][C ALL]
100000 **ENTER** .70 **X CHS PV**	100000 x .70 = 70000 [+/-] **PV**
32 **N**	32 **N**
3 **i**	3 **I/YR**
FV	**FV**
$180,255.79	$180,255.79
HP12c STEP 2:	**HP10bii+ STEP 2:**

Begin mode

180255.79 **PMT**

33 **N**

10 **ENTER** 3 - **ENTER** 1.03 ÷ **i**

PV

2,509,106.34

HP10bii+ STEP 3:

End Mode

2,509,106.34 **FV**

32 **N**

10 **I/YR**

PMT

Solution $12,474.57

Begin mode

180255.79 **PMT**

33 **N**

(10 – 3) ÷ 1.03 = 6.7961 **I/YR**

PV

2,509,106.34

HP10bii+ STEP 3:

End Mode

2,509,106.34 **FV**

32 **N**

10 **I/YR**

PMT

$12,474.57

Score: 0%

Question 259

Carson's annuity will pay an annual amount of $1800 beginning today for the next 9 years. If the guaranteed interest rate of the annuity is 6.5%, what is the future value of Carson's annuity?

- $22,109.14
- $22,489.96
- $22,896.34
- $22.543.90

HP12C

G, BEG

F, CLX, F, X>Y

1800, **CHS PMT**

6.5, **I**

9, **N**

FV,

Solution = 22,489.96058 or $22,489.96

HP10bII+

BEGIN MODE

SHIFT, **C ALL**

1800, **+/- PMT**

6.5, **I/YR**

9, **N**

FV,

Solution = 22,489.96058 or $22,489.96

Score: 0%

Question 260

Jimmy's Taco's, LLC has decided to purchase a new stove directly from a manufacturer for $10,000. Jimmy has agreed to pay the manufacturer $1,000 at the beginning of each year with an agreed-upon interest rate of 4.7296%. How many years will it take them to pay off the stove?

- 13
- 18
- 11
- 15

HP12C
G, BEG
F, CLX, F, X>Y
1,000, **CHS PMT**
4.7296, **I**
10,000 **PV**
0, **FV**
N
Solution = 13

HP10bII+
BEGIN MODE
SHIFT, **C ALL**
1,000, **+/- PMT**
4.7296, **I/YR**
10,000 **PV**
0, **FV**
N
Solution = 13

Score: 0%

Question 261

Greg receives a monthly payment of $975 from an insurance company. The insurance company has agreed to pay this amount for 5 years and earns 8% compounded monthly on the amount. Calculate the present value of this annuity.

- $48,843.09
- $48,406.04
- $48,374.34
- $48,902.99

HP12C
G, BEG
F, CLX, F, X>Y
975, **CHS PMT**
8, **G, I**
5, **G, N**
0, **FV**
PV,
Solution = 48,406.04188 or $48,406.04

HP10bII+
BEGIN MODE
SHIFT, **C ALL**
975, **+/- PMT**
8/12, (= .6667), **I/YR**
5x12, (= 60) **N**
0, **FV**
PV,
Solution = 48,406.04188 or $48,406.04

Score: 0%

Question 262

Bob worked for 25 years as a successful dentist and recently retired with $4,500,000. He wants to withdraw equal payments at the beginning of each month for the next 27.5 years and expects to earn 7.5% compounded monthly on his retirement savings. How much will each monthly payment be?

- $32,051.43
- $32,573.92
- $32,743.12
- $32,178.34

HP12C	*HP10bII+*
G, BEG	BEGIN MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
4,500,000, **CHS PV**	4,500,000, **+/- PV**
7.5, **G I**	7.5/12, (= .6250) **I/YR**
27.5, **G N**	27.5x12 (= 330), **N**
0, **FV**	0, **FV**
PMT,	**PMT,**
Solution = $32,051.43	Solution = $32,051.43

Score: 0%

Question 263

Your client buys F stock for $10. One year later F has paid $4 in dividends and your client decides to sell when the stock is at $22. Calculate your client's Holding Period Return.

- 120%
- 20%
- 160%
- 60%

$$\frac{4 + (22 - 10)}{10} = 160\,\%$$

$22 sale, minus $10 initial investment, plus $4 dividend, divided by $10 initial investment for a Holding Period Return of 160%.

Score: 0%

Question 264

Agatha needs to withdraw $50 per month from an account for the next 12 years to pay child support. She also wants to have $35,000 remaining in the account at the end of 12 years to gift to her child. What amount should Agatha deposit today, if she expects to earn 8% compounded monthly in her account?

- $18,574.90
- $19,374.23
- $18,093.95

◉ $19,874.94

HP12C	*HP10bII+*
G, BEG	BEGIN MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
50, **PMT**	50, **PMT**
8, **G**, **I**	8/12, (=.6667), **I/YR**
12, **G**, **N**	12x12, (= 144) **N**
35000, **FV**	35000, **FV**
PV,	**PV**,
Solution = 18,093.95	Solution = 18,093.95

Score: 0%

Question 265

Verne plans to take a sabbatical and live off his savings of $50,000 for the next year. He expects to earn 3% on his account. What lump sum can he withdraw at the beginning of each month and still have enough to last him for the full year?

○ $5,023.10
○ $4,224.12
○ $4,673.33
◉ $5,432.99

HP12C	*HP10bII+*
G, BEG	BEGIN MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
3/12 = .25, **I**	3/12 = .25, **I/YR**
12, **N**	12, **N**
50,000 **PV**,	50,000 **PV**,
PMT	**PMT**
Solution = $4,224.12	Solution = $4,224.12

Score: 0%

Question 266

Your client is worried about how inflation will impact their portfolio and their ability to pay for their future goals. If they are averaging 7% return on their portfolio and inflation is expected to average 3% over the next 10 years, what is their real rate of return?

- 3.88
- 4.25
- 5.69
- 5.70

1.07 / 1.03 = (1.0388 -1) x100 = 3.88%

Score: 0%

Question 267

Hilary took out a car loan for $50,000. If she pays $842.38 a month at the **beginning** and her loan interest is 5%, how many months will it take her to pay off the loan?

- 68
- 66
- 73
- 75

HP12C
Begin, End
F, CLX, F, X>Y
842.38, **CHS PMT**
5 **g**, **I**
50,000 **PV**
0, **FV**
N
Solution = 68

HP10bII+
Begin MODE
SHIFT, **C ALL**
842.38, **+/- PMT**
5/12=.4166, **I/YR**
50,000 **PV**
0, **FV**
N
Solution = 68

Score: 0%

Question 268

Kendall won $25,000 from the lottery. He plans to invest the money for the next 15 years and believes he will earn 6% annually after tax. How much will his portfolio be at the end of 15 years?

- $60,000
- $59,253.65
- $59,863.52
- $59,913.96

10BII+	HP12C
END MODE	G, END
SHIFT, **C ALL**	F, CLX, F, X>Y
25,000, **+/- PV**	25,000, **CHS PV**
6, **I/YR**	6, **I**
15, **N**	15, **N**
FV,	**FV**,
Solution = $59,913.96	Solution = $59,913.96

Score: 100%

Question 269

Bobby invested $29,750 in an account earning 7.5% compounded quarterly. What is the value of the account at the end of 10 years, assuming the interest generated is reinvested back into the account?

- $62,544.89
- $58,231.04
- $67,895.44
- $56,652.65

HP12C	*HP10BII+*
F, CLX, F, X>Y	Shift, C ALL
$29,750 **CHS PV**	+/- $29,750 **PV**
10 **Enter** 4 **X** (= 40) **N**	10 x 4 = 40 **N**
7.5 **Enter** 4 **/** (= 1.875) **I**	7.5 / 4 = 1.875 **I/YR**
Solve for **FV** = $62,544.89	Solve for **FV** = $62,544.89

Score: 0%

Question 270

Your client buys GE stock for $50. One year later GE has paid $5 in dividends and your client decides to sell when the stock is at $60. Calculate your client's Holding Period Return.

- 30%
- 25%
- 27%

35%

$\frac{5+(60-50)}{50} = 30\,\%$

Score: 100%

Question 271

Beth wants to save for a new car in 6 years. She expects it to cost roughly $15,000 at the time of purchase. How much must she deposit today in order to have enough to purchase the car if she earns .5% on her investments and she already has $10,000 saved?

4,432.34

4,984.33

4,873.21

4,557.77

HP12C
F, CLX, F, X>Y
$15,000 FV
.5, I
6, N
PV,
Solution = 14,557.77 – 10,000 = 4,557.77

HP10bII+
SHIFT, C ALL
$15,000 FV
.5, I/YR
6, N
PV,
Solution = 14,557.77 – 10,000 = 4,557.77

Score: 100%

Question 272

Andy, a conservative investor, will enter retirement next year with $775,000 in his IRA. He plans to make monthly withdrawals from his retirement account at the beginning of each month and will earn 4.75%, compounded monthly, on his retirement savings. If he makes theses withdrawals for the next 26.5 years, how much will he receive each month?

$4,271.88

$3,798.15

$3,548.82

$3,478.32

HP12C
G, BEG
F, CLX, F, X>Y
775,000, **CHS PV**
4.75, **G I**

HP10bII+
BEGIN MODE
SHIFT, **C ALL**
775,000, **+/- PV**
4.75/12, (= .3958) **I/YR**

26.5, **G N**	26.5x12 (= 318), **N**
0, **FV**	0, **FV**
PMT,	**PMT,**
Solution = 4,271.88	Solution = 4,271.88

Score: 0%

Question 273

Your client wants to buy an investment for $110,000 that will produce the following positive cash flows

Year	Cash Flow
1	$6,000
2	$7,000
3	$8,000

At the end of three years, he will sell the investment for $112,000. What is his Internal Rate of Return?

- 6.8894
- 7.7445
- 5.6912
- 5.8213

HP12C	*HP10bII+*
G, END	END MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
110,000 **CHS CF$_0$**	110,000 +/- CF$_0$
6,000 **G CF$_j$**	6,000 CF$_1$
7,000 **G CF$_j$**	7,000 CF$_2$
120,000 **G CF$_j$**	120,000 CF$_3$
F, **IRR**	SHIFT, IRR
Solution = 6.89	Solution = 6.8894

Score: 0%

Question 274

Tom would like to take a 3-year sabbatical. He calculates he will need $1,000 at the beginning of each month for three years. Assuming a 9.75% interest rate compounded monthly, how much must Tom deposit now to reach his goal?

- $31,356.98
- $31,298.42
- $31,390.23
- $31,217.90

HP12C	*HP10bII+*
G, BEG	BEG MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
1000, **CHS PMT**	1000, **+/- PMT**
9.75, **G I**	9.75/12 (=.8125), **I/YR**
3, **G, N**	3x12 (= 36), **N**
0, **FV**	0, **FV**
PV	**PV**
Solution = 31,356.9782 or $31,356.98	Solution = 31,356.9782 or $31,356.98

Score: 0%

Question 275

Your client is worried about how inflation will impact their portfolio and their ability to pay for their future goals. If they are averaging 12% return on their portfolio and inflation is expected to average 9% over the next 10 years, what is their real rate of return?

- 2.75
- 2.55
- 2.62
- 2.25

1.12 / 1.09 = (1.0275 -1) x100 = 2.75%

Score: 0%

Question 276

What is the YTM of a zero coupon bond that matures in 8 years with a maturity value of $1,000, does not pay a coupon, and the current price is $900?

- 1.9862
- 1.3214
- 1.1722
- 1.3484

HP12C	*HP10bII+*

End Mode	End Mode
F, CLX, F, X>Y	SHIFT, **C ALL**
1,000, **FV**	1,000, **FV**
16, **N**	16, **N**
900 **CHS PV**	900 **+/- PV**
I,	**I/YR,**
Solution = .6607 x2 = 1.3214	Solution = .6607 x2 = 1.3214

Score: 0%

Question 277

Isaac purchased a zero-coupon and bond 10 years ago for $375. The bond will mature today with a face value of $1000. The interest compounds semiannually. Calculate the average annual compound rate of return.

- 10.5639
- 10.0935
- 10.0528
- 10.3497

HP12C	*HP10bII+*
F, CLX, F, X>Y	END MODE
G, END	SHIFT, **C ALL**
375, **CHS PV**	375, **+/- PV**
1000, **FV**	1000, **FV**
10 **Enter** 2, **X** (= 20) **N**	10x2, (= 20) **N**
0, **PMT,**	0, **PMT,**
I,	**I/YR,**
Solution = 5.0264 **Enter** 2 **X** = 10.0528	Solution = 5.0264x2 = 10.0528

Score: 0%

Question 278

Your client is worried about how inflation will impact their portfolio and their ability to pay for their future goals. If they are averaging 5% return on their portfolio and inflation is expected to average 4% over the next 10 years, what is their real rate of return?

- 1
- .96
- .89
- .25

1.05 / 1.04 = (1.0096 -1) x100 = .96%

Score: 0%

Question 279

Luca was just given an interest-free, forgivable loan of $75,000 from his wealthy uncle for his car wash business. He plans to make equal, quarterly withdrawals for the next 5 years to fund ongoing expenses and can earn 5% compounded quarterly. How much will Luca withdraw at the beginning of every quarter?

- $4,549.12
- $4,208.92
- $4,198.65
- $4,754.32

HP12C
G, BEG
F, CLX, F, X>Y
75,000, **CHS PV**
5 **Enter** 4, **/** (= 1.2500) **I**
5 **Enter** 4, **X** (=20), **N**
0, **FV**
PMT,
Solution = $4,208.92

HP10bII+
BEGIN MODE
SHIFT, **C ALL**
75,000, **+/- PV**
5/4, (= 1.2500) **I/YR**
5x4 (=20), **N**
0, **FV**
PMT,
Solution = $4,208.92

Score: 0%

Question 280

Jan just purchased a duplex for $1,000,000. She put down 20% and financed the remainder over 30 years. Her interest rate was 2.99%. How much interest will Jan pay to the lender over the life of her loan?

- $412,667.20
- $456,384.50
- $432,593.60
- $432,142.75

HP12C
Step 1
F, CLX, F, X>Y
G, END
1,000,000 **Enter** .8, **X** (= 800,000) **CHS PV**
0, **FV**
30 **G 12X** (= 360) **N**
2.99 **G 12/** (= .2492) **I,**
PMT, 3,368.52
Step 2

HP10bII+
Step 1
END MODE
SHIFT, **C ALL**
1,000,000 x .8, (= 800,000) **+/- PV**
0, **FV**
30x12, (= 360) **N**
2.99/12, (= .2492) **I/YR,**
PMT, 3,368.52
Step 2

3,368.52 (payment) x 360 (total payments) = $1,212,667.20 (total amount paid)

$1,212,667.20 – 800,000 (loan amount) = $412,667.20

3,368.52 (payment) x 360 (total payments) = $1,212,667.20 (total amount paid)

$1,212,667.20 – 800,000 (loan amount) = $412,667.20

Score: 0%

Question 281

Ian wants to make systematic annual gifts of $15,000 to each of his five grandchildren over the next 10 years at the beginning of each year. He expects to earn 6% compounded annually on his investment and wants to have $125,000 remaining at the end of the 10 years. What amount should be deposited today to reach this goal?

- 654,926.27
- $654,273.8343
- $654,842.9854
- $654,264.2346

HP12C

G, BEG

F, CLX, F, X>Y

75000 (15000 x 5), **CHS PMT**

6, **I**

10, **N**

125000, **CHS FV**

PV

Solution = 654,926.27

HP10bII+

BEGIN MODE

SHIFT, **C ALL**

75000 (15000 x 5), **+/- PMT**

6, **I/YR**

10, **N**

125000, **+/- FV**

PV

Solution = 654,926.27

Score: 0%

Question 282

Jamie has been saving $3000 at the beginning of each year for the past 10 years to start a business. How much is in the account assuming the account earned 11.25% compounded annually?

- $56,486.04
- $56,312.87
- $56,126.89
- $56,034.21

HP12C

G, BEG

F, CLX, F, X>Y

3000, **CHS PMT**

HP10bII+

BEGIN MODE

SHIFT, **C ALL**

3000, **+/- PMT**

11.25, **I**	11.25, **I/YR**
10, **N**	10, **N**
FV,	**FV**,
Solution = 56,486.0444 or $56,486.04	Solution = 56,486.0444 or $56,486.04

Score: 0%

Question 283

Alyssa is nearing retirement and has been interested in purchasing an annuity. She'd like to be able to withdraw $12,000 at the beginning of each year for the next 22 years. She expects to earn 9% compounded annually on the investment. What lump sum should Alyssa deposit in order to meet this need?

- $123,784.93
- $123,506.93
- $123,327.39
- $123,409.73

HP12C	*HP10bII+*
G, BEG	BEGIN MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
12000, **CHS PMT**	12000, **+/- PMT**
9, **I**	9, **I/YR**
22, **N**	22, **N**
0, **FV**	0, **FV**
PV	**PV**
Solution = 123,506.9248 or $123,506.93	Solution = 123,506.9248 or $123,506.93

Score: 0%

Question 284

Joe, a conservative investor, will enter retirement next year with $675,000,000 in his IRA. He plans to make monthly withdrawals from his retirement account at the beginning of each month and will earn 1.25%, compounded monthly, on his retirement savings. If he makes theses withdrawals for the next 28 years, how much will he receive each month?

- $2,381,992.41
- $2,379,514.00
- $2,434,384.27
- $2,537,873.12

HP12C	*HP10bII+*
G, BEG	BEGIN MODE
F, CLX, F, X>Y	SHIFT, **C ALL**

675,000,000 **CHS PV**	675,000,000 **+/- PV**
1.25, **G I**	1.25/12, (= .1041666) **I/YR**
28, **G N**	28 x12 (= 336), **N**
0, **FV**	0, **FV**
PMT,	**PMT,**
Solution = $2,379,514.00	Solution = $2,379,514.00

Score: 0%

Question 285

At the end of June Lois decides to take a sabbatical and live off her savings of $25,000 for the rest of the year. She expects to earn 8% compounded annually on her account. What lump sum can she withdraw at the beginning of each month and still have enough to last her for the full timeframe?

- $4,453.72
- $4,264.42
- $4,236.19
- $4,131.01

HP12C	*HP10bII+*
G, BEG	BEGIN MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
8/12 = .666, **I**	8/12 = .666, **I/YR**
6, **N**	6, **N**
25,000 **PV**,	25,000 **PV**,
PMT	**PMT**
Solution = $4,236.19	Solution = $4,236.19

Score: 0%

Question 286

Roxanne wants to save for a new car in 4 years. She expects it to cost roughly $10,000 at the time of purchase. How much must she deposit today in order to have enough to purchase the car if she earns 5% on her investments and she already has $3,000 saved?

- 5,227.03
- 5,873.23
- 5,349.21
- 5,982,45

HP12C	HP10bII+
F, CLX, F, X>Y	SHIFT, C ALL

$10,000 FV	$10,000 FV
5, I	5, I/YR
4, N	4, N
PV,	PV,
Solution = 8,227.03 – 3,000 = 5,227.03	Solution = 8,227.03 – 3,000 = 5,227.03

Score: 0%

Question 287

Henry would like to take a 3-year vacation to travel the world. He calculates he will need $1,500 at the beginning of each month for three years. Assuming a 9.75% interest rate compounded monthly, how much must Henry have saved at the start of vacation to reach his goal?

- $47,035.47
- $47,459.23
- $47,279.12
- $47,934.45

HP12C	*HP10bII+*
G, BEG	BEGIN MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
1500, **CHS PMT**	1500, **+/- PMT**
9.75, **G, I**	9.75/12 (=.8125), **I/YR**
3, **G, N**	3x12 (= 36), **N**
0, **FV**	0, **FV**
PV	**PV**
Solution = 47,035.46732 or $47,035.47	Solution = 47,035.46732 or $47,035.47

Score: 0%

Question 288

Your client is deciding between two investments. Investment A was purchased for $7 and paid $1 in dividends before being sold for $11. While investment B was purchased for $62 and paid $5 of dividends before being sold for $90. Which investment had the better Holding Period Return?

- Investment A
- Investment B

$$Investment\ \ A\ \ =\ \ \frac{1+(11-7)}{7}=71.4\%\ Investment\ \ B\ \ =\ \ \frac{5+(90-62)}{62}=53.2\%$$

Score: 0%

Question 289

What is the YTC of a bond that matures in 10 years with a maturity value of $1,000, pays an 10% coupon (paid semi-annually), and the current price is $1,000? The bond is callable in 9 years at a special call price of $1,500.

- 13.0745
- 13.2365
- 13.8785
- 13.6545

HP12C	*HP10bII+*
End Mode	End Mode
F, CLX, F, X>Y	SHIFT, **C ALL**
1,500, **FV**	1,500, **FV**
18, **N**	18, **N**
50, **PMT**	50, **PMT**
1000 **CHS PV**	1000 **+/- PV**
I,	**I/YR,**
Solution = 6.5373 x2 = 13.0745	Solution = 6.5373 x2 = 13.0745

Score: 0%

Question 290

You are considering purchasing a stock with the following returns over the last 5 years.

Year 1	50%
Year 2	20%
Year 3	80%
Year 4	20%
Year 5	50%

What is the standard deviation of the stock's returns?

- 24.9
- 25.5
- 25.1
- 25.8

HP12C	***HP10BII+***
F, CLX, F, X>Y	SHIFT, **C ALL**
50 **Σ+**	50 **Σ+**
20 **Σ+**	20 **Σ+**
80 **Σ+**	80 **Σ+**
20 **Σ+**	20 **Σ+**
50 **Σ+**	50 **Σ+**

G S = 25.1 SHIFT SxSy = 25.1

Score: 0%

Question 291

Jared thinks CDs are a fantastic investment and decided to purchase a bank-issued certificate of deposit, 4 years ago, for $950. It matures today for $1000. What is the average annual compound rate of return on his investment?

- 1.1369
- 1.2906
- 1.3761
- 1.4871

HP12C	*HP10bII+*
F, CLX, F, X>Y	END MODE
G, END	SHIFT, **C ALL**
950, **CHS PV**	950, **+/- PV**
1000, **FV**	1000, **FV**
4 **N**	4 **N**
0, **PMT,**	0, **PMT,**
I,	**I/YR,**
Solution = 1.2906	Solution = 1.2906

Score: 0%

Question 292

What is the intrinsic value of a bond that matures in 10 years with a maturity value of $1,200, does not pay a coupon, and market rates for comparable bonds are 6%?

- $634.12
- $698.32
- $645.87
- $664.41

HP12C	*HP10bII+*
F, CLX, F, X>Y	SHIFT, **C ALL**
1,200, **FV**	1,200, **FV**
20, **N**	20, **N**
0, **PMT,**	0, **PMT,**
3, **I,**	3, **I/YR,**
PV	**PV**
Solution = -664.41	Solution = -664.41

Score: 100%

Question 293

John has decided to save for his child's 18th birthday in 11 years. John contributes $11,000 into a UTMA on the last day of each year. What return must John achieve if he wants to gift his child $200,000?

- 9.647
- 9.432
- 9.876
- 9.099

HP12C	*HP10bII+*
G, END	END MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
11,000 **CHS PMT**	11,000, **+/- PMT**
11 **N**	11 **N**
200,000 **FV**	200,000 **FV**,
I	**I**
Solution = 9.647	Solution = 9.647

Score: 0%

Question 294

Jack took out a $97,790.64 loan from his rich uncle. He has to pay back $10,000 every quarter on the first of the month. How many **years** will it take him to pay off the loan if his uncle charges him a 2% interest rate?

- 2.9
- 2.5
- 2.8
- 2.2

HP12C	*HP10bII+*
G, BEG	BEGIN MODE
F, CLX, F, X>Y	SHIFT, **C ALL**
10,000, **CHS PMT**	10,000, **+/- PMT**
2 **enter** 4 **/**, **I**	2/4=.5, **I/YR**
97,790.64 **PV**	97,790.64 **PV**
0, **FV**	0, **FV**
N	**N**
Solution = 10 / 4 = 2.5	Solution = 10 / 4 = 2.5

Score: 0%

Question 295

Juliana took out a car loan for $33,078.56. If she pays $333 a month at the **beginning** of the month and her loan interest is 3%, how many **years** will it take her to pay off the loan?

- 9.9
- 9.2
- 9.5
- 9.8

*Note that the rule of thumb for loan repayment calculations is to be in END mode. However, if the question specifically says otherwise you should do what the question says.

HP12C
G, BEG
F, CLX, F, X>Y
333, **CHS PMT**
3 **g**, **I**
33,078.56 **PV**
0, **FV**
N
Solution = 114 / 12 = 9.5

HP10bII+
BEGIN MODE
SHIFT, **C ALL**
333, **+/- PMT**
3/12=.25, **I/YR**
33,078.56 **PV**
0, **FV**
N
Solution = 114 / 12 = 9.5

Score: 0%

Question 296

What is the YTC of a bond that matures in 10 years with a maturity value of $1,000, pays an 10% coupon (paid semi-annually), and the current price is $1,000? The bond is callable in 2 years at a special call price of $1,050.

- 12.3465
- 12.2812
- 12.8732
- 12.5514

HP12C
End Mode
F, CLX, F, X>Y
1,050, **FV**
4, **N**
50, **PMT**
1000 **CHS PV**
I,
Solution = 6.1406 x2 = 12.2812

HP10bII+
End Mode
SHIFT, **C ALL**
1,050, **FV**
4, **N**
50, **PMT**
1000 **+/- PV**
I/YR,
Solution = 6.1406 x2 = 12.2812

Score: 0%

Question 297

Harper purchased 100 shares of XYZ stock for $48.50 per share 6 years ago. Today Harper sold all of her shares for $8.75. What is the average annual compound rate of return on her investment in XYZ (excluding taxation)?

- -24.3742
- 24.8300
- -24.8300
- 24.3742

HP12C
F, CLX, F, X>Y
G, END
100 **Enter** 48.50 **X** (=4850), **CHS PV**
100 **Enter** 8.75 **X** (= 875) **FV**
6, **N**
0, **PMT,**
I,
Solution = -24.83

HP10bII+
END MODE
SHIFT, **C ALL**
100 x 48.50 (=4850), **+/- PV**
100 x 8.75, (= 875) **FV**
6, **N**
0, **PMT,**
I/YR,
Solution = -24.83

Score: 0%

Question 298

Abby plans to take a sabbatical and live off her savings of $15,000 for the next 6 months. She expects to earn 8% compounded annually on her account. What lump sum can she withdraw at the end of each month and still have enough to last her for the full timeframe?

- $2,558.66
- $2,387.21
- $2,012.21
- $2,487.32

HP12C
G, END
F, CLX, F, X>Y
8/12 = .666, **I**
6, **N**
15,000 **PV**,
PMT
Solution = $2,558.66

HP10bII+
End MODE
SHIFT, **C ALL**
8/12 = .666, **I/YR**
6, **N**
15,000 **PV**,
PMT
Solution = $2,558.66

Score: 0%

Question 299

Your client is worried about how inflation will impact their portfolio and their ability to pay for their future goals. If they are averaging 9.5% return on their portfolio and inflation is expected to average 7% over the next 10 years, what is their real rate of return?

- 2.34
- 1.55
- 2.66
- 1.96

1.095 / 1.07 = (1.02336 -1)x100 = 2.34%

Score: 0%

100% COMPLETED