FOM12
Compound Interest & the Graphing Calculator   Name: _____

For the following questions, use the TVM Solver on your calculator to solve.

1. Find the accumulated amount for the following investments:

a) $2500 at 10% compounded quarterly for 3 years.

One Time

N=3 yr I=10 PV=−2500 PMT=0 FV=3362.22 P/Y=1 C/Y=4 END/BEGIN

b) $4000 at 3% compounded monthly for 2 years.

N=2yr I=3 PV=−4000 PMT=0 FV=4247.03 P/Y=1 C/Y=12 END/BEGIN

c) $600 at 8% compounded semi-annually for 5 years.

N= I= PV= PMT=0 FV= P/Y=1 C/Y= END/BEGIN

d) $1200 at 5% compounded semi-annually for 7 years.

N= I= PV= PMT=0 FV= P/Y=1 C/Y= END/BEGIN

2. A certain sum of money was invested @ 2% compounded semi-annually. After 11 years the accumulated amount was $373.41. How much was invested initially?

One Time

N	I (%)	PV	PMT	FV	P/Y	C/Y	PMT
11 yr	2	−300	0	373.41	1	2	Begin

$300

3. Eight years ago, Connor invested an amount of money @ 6%, compounded quarterly. Today, it is worth $1 207.74. How much did he invest originally?

One Time

N	I (%)	PV	PMT	FV	P/Y	C/Y	PMT
8	6%	solve	Ø	1207.74	1	4	Beg.

$750

4. Jackson puts $50 every month into a GIC that earns 4.75% compounded monthly. How much money will he have after 4 years?

Reg Payment

N (payments) # of	I (%)	PV	PMT	FV	P/Y	C/Y	PMT
48	4.75%	Ø	−50	solve	12	12	End

4 yrs × 12 pay/yr

$2637.43

Total Invested = $50 × 48 payments = $2400
(PMT × N)

5. Kaitlyn wants to save $8,000 for a trip to Australia. If she needs the money in 3 years and she can earn 5.5% compounded quarterly, how much must she put aside every week?

3yr x 52 times/yr

N	I (%)	PV	PMT	FV	P/Y	C/Y	PMT
156	5.5%	∅	Solve	$8000	52	4	End.

$47.22

6. Loren puts $150 into an investment every month that earns 9% compounded semi-annually. How many payments must she make to accumulate $5000? How many years is this?

N	I (%)	PV	PMT	FV	P/Y	C/Y	PMT
Solve.	9%	0	−150	5000	12	2	End.

____30____ payments = ____2.5____ years

Monthly payments

÷ 12 months/yr.