

Unit 3

Answer:

Option #	Contributions	Total Interest Earned	Final Balance
1	\$9,000.00	\$6,250.50	\$15,250.50
2	\$9,000.00	\$8,467.04	\$17,467.04
3	\$1,000.00	\$5,489.17	\$6,489.17

- 1) The least invested was option 3 with \$1,000.00. There were no other contributions after the \$1,000.00 and the interest rate was higher than the other plans at 6.25% APR compounded monthly.
- 2) The option that yielded the highest amount at the end of the 30 years was #2 with \$100 invested quarterly at a rate of 4.00% APR.
- 3) The difference in principal between option 3 and option 2 is \$8,000.00. The difference in their interest is \$2,977.87.
- 4) It is better to invest money at the beginning than at the end because the principal balances are higher and with compounding you earn more in interest which can be seen when comparing options 2 and 3. Option 2 had \$8,000.00 more in principal invested but only had \$2,977.87 more in interest because not all \$9,000.00 was invest at the beginning.

I would recommend plan 3 and invest as much as possible at the very beginning. If you can add more money during the 30 years that will just increase the principal even more and give you more interest earned.