

Calculating Compound Interest

Complete the following tables showing different savings options. Round answers to the nearest penny.

1. You plan to set aside \$500 for 5 years. The account pays annual interest of 8 percent, compounded **quarterly***. What is the ending balance (principal plus interest) at the end of 5 years?

Year	Beginning Amount	Quarter 1 Interest	Quarter 2 Interest	Quarter 3 Interest	Quarter 4 Interest	Ending Amount
1	\$500.00	\$10.00	\$10.20			\$541.22
2	\$541.22					
3						\$634.12
4				\$13.19		
5		\$13.73				

* hint: you need to divide the annual interest rate by 4 if you are compounding quarterly.

2. You plan to begin saving with \$100. You plan to save another \$100 at the beginning of each year for 5 years. The account pays annual interest of 8 percent, compounded **quarterly***. What is the ending balance (principal plus interest) at the end of 5 years?

Year	Beginning Amount	Yearly Deposit	Quarter 1 Interest	Quarter 2 Interest	Quarter 3 Interest	Quarter 4 Interest	Ending Amount
1	\$100.00	\$100.00	\$4.00				\$216.49
2	216.49	\$100.00					
3		\$100.00					
4		\$100.00					
5		\$100.00					

* hint: you need to divide the annual interest rate by 4 if you are compounding quarterly.