

# Chapter 11 Review Questions



Studying for a chapter examination is a personal process, one which nobody else can do for you. Simply take the time to review what you have done. Here are the new terms in Chapter 11.

Add-on interest [11.2]	Euler's number [11.1]	Natural base [11.1]
Adjusted balance method [11.2]	Evaluate a summation [11.4]	Open-ended loan [11.2]
Alternating series [11.4]	Exact interest [11.1]	Ordinary interest [11.1]
Amortization [11.6]	Expand a summation [11.4]	Partial sum [11.4]
Annual compounding [11.1]	Fibonacci sequence [11.3]	Periodic payment problem [11.5]
Annual percentage rate [11.2]	Fibonacci-type sequence [11.3]	Present value [11.1]
Annuity [11.5]	Finance charge [11.2]	Present value formula [11.1]
APR [11.2]	Finite series [11.4]	Present value of an annuity [11.6]
Arithmetic sequence [11.3]	Five-percent offer [11.2]	Previous balance method [11.2]
Arithmetic series [11.4]	Future value [11.1]	Principal [11.1]
Average daily balance method [11.2]	Future value formula [11.1]	Quarterly compounding [11.1]
Closed-ended loan [11.2]	Geometric sequence [11.3]	Revolving credit [11.2]
Common difference [11.3]	Geometric series [11.4]	Semiannual compounding [11.1]
Common ratio [11.3]	Grace period [11.2]	Sequence [11.3]
Compound interest [11.1]	Infinite series [11.4]	Series [11.4]
Compound interest formula [11.1]	Inflation [11.1]	Sigma notation [11.4]
Continuous compounding [11.1]	Installment loan [11.2]	Simple interest formula [11.1]
Credit card [11.2]	Interest [11.1]	Sinking fund [11.5]
Daily compounding [11.1]	Interest rate [11.1]	Sticker price [11.2]
Dealer's cost [11.2]	Line of credit [11.2]	Summation notation [11.4]
$e$ [11.1]	Lump-sum problem [11.5]	Term of a sequence [11.3]
	Monthly compounding [11.1]	Time [11.1]
	Monthly payment [11.5]	

If you can describe the term, read on to the next one; if you cannot, then look it up in the text (the section number is shown in brackets). Next, study the types of problems listed at the end of Chapter 11.

## TYPES OF PROBLEMS

Be able to estimate reasonable answers to financial problems. [11.1-11.7]

Find the amount of interest if you are given the purchase price, length of loan, and the monthly payment. [11.1]

Find the total amount to be repaid for a simple interest loan. [11.1]

Calculate the future value. [11.1]

Calculate the present value. [11.1]

Compare the amount of interest and future value for simple and compound interest. [11.1]

Be able to calculate the future value due to inflation. [11.1]

Be able to calculate the present value due to inflation. [11.1]

Calculate the time necessary to achieve an investment goal. [11.1]

How much must be deposited into a bank account to provide a given monthly income. [11.1]

Be able to calculate the monthly payment using add-on interest. [11.2]

Make an appropriate offer on a new car. [11.2]

Calculate the APR for installment loans or for credit cards. [11.2]

Be able to calculate the amount of credit card interest by using the previous balance method, the adjusted balance method, and the average daily balance method; which is better from the consumer point of view? [11.2]

Find the amount of interest, the monthly payment, and the APR for consumer transactions. [11.2]

Determine the monthly payment for an automobile using add-on interest. [11.2]

Find the APR if you are given the price, length of time, and the add-on interest rate. [11.2]

Calculate the APR given the amount financed, the monthly payment, the length of time financed. [11.2]

Classify a given sequence as arithmetic, geometric, or Fibonacci; be able to find the next term. [11.3]

Write out the terms of a sequence when given the general term; find a specific term. [11.3]

Evaluate (expand) summation expressions. [11.4]

Find sums by classifying and using the series formulas. [11.4]

Distinguish between sequences and series in application problems. [11.4]

Calculate the amount you can save by making a periodic payment into an interest-bearing account (annuity). [11.5]

Calculate the amount you need to deposit into an interest-bearing account to have a given amount at some time in the future (sinking fund). [11.5]

Find the present value of an annuity. [11.6]

Calculate the amount of money you can borrow, given a monthly payment, interest rate, and length of time (present value of an annuity). [11.6]

Find the monthly payment for an amortized loan. [11.6]

Calculate the down payment for a home, given the price; given the amount of the down payment, calculate the price. [11.6]

Given a monthly payment, interest rate, and length of time, find the amount of loan. [11.6]

Work applied financial problems. [11.1-11.7]

Once again, see if you can verbalize (to yourself) how to do each of the listed types of problems.

Work all of Chapter 11 Review Questions (whether they are assigned or not). Work through all of the problems before looking at the answers, and *then* correct each of the problems. The entire solution is shown in the answer section at the back of the text. If you worked the problem correctly, move on to the next problem, but if you did not work it correctly (or you did not know what to do), look back in the chapter to study the procedure, or ask your instructor.

Finally, go back over the homework problems you have been assigned. If you worked a problem correctly, move on the next problem, but if you missed it on your homework, then you should look back in the book or talk to your instructor about how to work the problem.

If you follow these steps, you should be successful with your review of this chapter.