

OVERVIEW

Even if you don't need to borrow money today, you'll soon be flooded with tempting offers for car loans, credit cards, cash-advance loans, cellphone service, and more. Boosting your borrowing IQ now will prepare you to make smarter decisions whenever you decide to take the credit plunge.

This lesson will help you calculate the costs of borrowing options.

LEARNING OUTCOMES

In this lesson you will calculate the costs of borrowing options. Along the way you will:

- Give examples of how credit is used.
- Identify typical costs and terms of credit.
- Calculate the cost of using credit.

Use what you learn to consider borrowing options for a specific situation.

LEARNING TASKS

These tasks match pages 9-15 in Student Guide 2.

__ 1.	Jesse did the math on a laptop deal and realized the bargain wasn't a bargain at all. See if you can spot a bargain from several offers.
__ 2.	Listen to a presentation about the costs of using credit. Complete Activity 2.3: Simply Tell the Total to calculate the total costs of credit purchases.
__ 3.	Calculate average monthly payments to repay a loan. Complete Activity 2.4: What is the Average Payment.
__ 4.	<p>Mariah did a good job of comparing credit card options available to her. How good were your instincts? Time to find out if you were right.</p> <p>Figure out the monthly payment, total interest paid, and total cost for several purchases by completing the Pick an Option task. Figure out which is the better deal. Then, choose which deal you would take, and explain why you made that choice.</p>
__ 5.	Pick a situation where you or your family uses credit. Complete Challenge 2-A: DECIDE The Best Deal for You.



TAKING IT HOME

Compare phones and calling plans for your family. Gather information about at least two local phone plans provided by different companies. Find out what information you need to provide to the phone companies when you apply for the phone plans.

Use the DECIDE decision-making process learned in Module 1 to establish criteria for selecting a phone plan based on your current needs and financial situation. Compare the terms of each plan, and consider the advantages and disadvantages of each plan. Decide which option best meets your criteria.



FURTHER STUDY

Bring in car ads that include leasing options and financing information. Calculate out the cost of vehicles, comparing leasing versus purchasing.

Discuss the financial issues (good and bad) related to leasing a vehicle. Who would be the best candidate to lease a car? When might it make sense to lease a car versus purchasing a car?

Task: Pick an Option

NAME:

DATE:

Directions:

Jesse did the math on a laptop deal and realized the bargain wasn't a bargain at all. See if you can spot a bargain in the offers below. For each purchase, check the option that you think would be the best credit deal.

*Best Deal	Option	Purchase Price	Monthly Payments	Total Interest	Total Cost
Purchase a Computer					
<input type="checkbox"/>	Store Financing: 24 monthly payments at 11.9% APR	\$1,400	\$	\$	\$
<input type="checkbox"/>	Credit Card: 36 monthly payments at 15.9% APR	\$1,400	\$	\$	\$
Purchase a Stereo System					
<input type="checkbox"/>	Store Financing: 12 monthly payments at 13.5% APR	\$800	\$	\$	\$
<input type="checkbox"/>	Credit Card: 24 monthly payments at 18% APR	\$800	\$	\$	\$
Purchase a Car					
<input type="checkbox"/>	Car A: 7% APR for 60 months	\$20,000	\$	\$	\$
<input type="checkbox"/>	Car B: 3.9% APR for 30 months	\$23,000	\$	\$	\$
Purchase a Big Screen TV					
<input type="checkbox"/>	Store Financing: no payments for three months, but monthly interest charges start immediately at 10% APR; then six months of payments.	\$1,900	\$	\$	\$
<input type="checkbox"/>	Credit Union: 11% APR for 12 months	\$1,900	\$	\$	\$
Purchase a Truck					
<input type="checkbox"/>	Option A: \$1,500 rebate; 2.9% APR for 48 months	\$25,000	\$	\$	\$
<input type="checkbox"/>	Option B: \$0 rebate; 0.9% APR for 36 months	\$25,000	\$	\$	\$

Activity 2.3: Simply Tell the Total

NAME:

DATE:

Directions:

Use the simple interest formula to calculate the interest and the total amount to be repaid in one lump sum for the purchases below.

Simple Interest Rate Formula

$$I = P \times R \times T \text{ where}$$

I = interest

P = principal

R = interest rate (decimal number)

T = time (number of years)

Description	Principal (P)	Interest Rate (R)	Time in Years (T)	Interest (I)	Total Amount to be Repaid
Cash loan	\$100	40.0%	1/2 year	\$20 ($100 \times .4 \times .5$)	\$120 ($\$100 + \20)
Big-screen TV	\$700	7.0%	2 years	\$	\$
College loan	\$12,000	3.5%	15 years	\$	\$

Activity 2.4: What is the Average Payment?

NAME:

DATE:

Directions:

Figure out the average monthly payments for two purchases made with loans using the amortization calculation formula.

Alternatives: Do your own amortization calculations using spreadsheet software* or generate an amortization payment chart by using an online financial calculator.

Amortization Calculation Formula

$$A = P \frac{r(1+r)^n}{(1+r)^n - 1}$$

A = payment amount

P (aka **pv**) = principal (the present value of the loan)

r = interest rate, per period (decimal number)

n = total number of payments over which the loan will be repaid

Description	Present Value of Loan (pv)	Annual Interest Rate (APR)	Interest Rate Per Period (r)	Number of Payments (n)	Payment Amount (A)	Total Amount to be Repaid
Cash Loan	\$100	40.0%	40% / 12 = \$3.33%	6	\$18.66	\$18.66 x 6 = \$111.96
Big-Screen TV	\$700	7.0%	7% / 12 = \$	24	\$	\$
College Loan	\$12,000	3.5%	3.5% / 12 = \$	180	\$	\$

*Microsoft Excel PMT Function: =PMT(r,n,-pv)

PMT Function example for cash loan: =PMT(.4/12,6,-100)

Activity 2.5: Choose the Best Deal

NAME:

DATE:

Directions:

Jesse has his eye on buying a used truck. Of the three options below, which do you think is the better deal if he borrows \$5,000 cash to be repaid in one lump sum?

- 7 percent APR payable in two years
- 5.5 percent APR payable in three years
- 4.75 percent APR payable in four years