



NCCVT

UNIT 5: PURCHASING & CREDIT

September 2010



5.1.1 Study: Sales Tax
Mathematics of Personal Finance Sem 1 (S1138480)

Study Sheet

Name: _____

Date: _____

The questions below will help you keep track of key concepts from this lesson's study activity. Use the study page numbers listed to help you fill in the blanks or solve the problems.

Page 1

Define *sales tax*.

Page 2

How does sales tax relate to the purchase price of a good or service?

Do states have the same sales tax?

Page 3

What are some additional ways that states raise money, aside from sales tax?

What are some things that states spend money on?

Page 4

Define *taxable items*.

Define *nontaxable items*.

What types of items are nontaxable items?

How do nontaxable items make sales tax less regressive?

Page 6

Describe how to estimate sales tax in your head

If the sales tax in the state is 6% and the purchase price is \$6.01, what would be a good estimate for the sales tax?

Page 7

What is the total of the taxable items on the shopping list?

What is the total of the nontaxable items on the shopping list?

What is the tax on the taxable items?

What is the total price?

Page 8

Describe how sales tax is regressive.

Look at the Rockefeller and Johnson family income pie charts. Why is the Rockefeller pie chart better than the Johnson pie chart? Provide a reason other than the obvious fact that Rockefeller has a higher income.

Page 9

Which range of sales tax do most states fall into?

Page 10

What are some items that commonly have an additional "sin tax"?

Page 11

Define *excise tax*.

Page 12

Add the total from the items in the 6% sales tax category and enter your answer here:

Add the total from the items in the 1% restaurant food tax category and enter your answer here:

Add the total from the item in the 5% alcohol tax category and enter your answer here:

Apply the correct tax to the total of each category and then find the total tax due:

5% tax on \$21 =

1% tax on \$14 =

5% tax on \$7 =

TOTAL TAX DUE:



Answer the following questions using what you've learned from this lesson. Write your responses in the space provided.

The table below gives information for three different grocery purchases made by people in different states. Using the example as a guide, fill in the missing information in the table.

	Taxable Amount	Non-Taxable Amount	Sales Tax Rate	Amount Paid in Sales Tax	Total Amount Paid
Example	\$60.00	\$89.00	5.5%	\$3.30	\$152.30
1.	\$30.00	\$122.00	6.5%		
2.		\$58.00	2.9%	\$0.58	
3.	\$80.00			\$4.48	\$188.48

- The fact that lower-income families will spend a higher percentage of their income on tangible goods that are taxable than higher-income families means that sales tax is what type of taxation system?
- Colin and Judith both bought the same radio for \$28. Colin lives in Indiana and pays 7% in sales tax, while Judith lives in California and pays 8.75% in sales tax. How much more did Judith pay in sales tax than Colin?
- Jill bought \$56.72 worth of groceries that consisted of baby food, bread, milk, and some fresh fruit. If she lives in a state that charges 7.25% sales tax on taxable items, what is the total amount of sales tax on her groceries?
- Elaine lives in Topeka, Kansas. Kansas has a sales tax of 5.3%, Shawnee County (where Topeka is located) has an additional sales tax of 1.15%, and Topeka has an additional sales tax of 1%. If Elaine buys a DVD player for her car for \$180, how much will she pay with sales tax included?
- Vernon lives in New Mexico and pays 5% in sales tax. He bought an air conditioner, and the amount he paid after sales tax was applied was \$1527.75. What was the cost of the air conditioner before sales tax was applied?
- Suppose a state gets its money from a state lottery, a property tax, an excise tax, and a sales tax of 4%. It will receive \$25 million from the state lottery, \$35 million from the property tax, and \$7 million from the excise tax this year. If it needs \$75 million to cover its expenses, how many dollars worth of taxable items must be purchased in the state this year for the state to break even?
- Certain items, such as gasoline, air travel, hunting equipment, cigarettes, and telecommunications services, have a special tax added to the purchase price. What is the name of this tax?



The questions below will help you keep track of key concepts from this lesson's study activity. Use the study page numbers listed to help you fill in the blanks or solve the problems.

Page 2

What is a coupon?

What is a rebate?

What is a sale?

Page 4

Suppose you buy a book for \$18 with a \$1.75-off coupon. If sales tax is 5%, how much do you pay for the book?

Suppose you buy a \$64 printer with a \$10 coupon. If sales tax is 5.6%, how much do you pay?

Page 5

If you buy a computer game for \$54, you have a \$5 mail-in rebate, and you pay 8% sales tax, how much does your game cost?

Suppose you bought the same computer game but, instead of a \$5 rebate, you had a \$5-off coupon. How much would the game cost?

Page 6

Suppose you buy a shirt that is originally priced at \$36. If there is a 30%-off sale and sales tax is 6.7%, how much do you pay for the shirt?

What is the difference between that price and the original price of the shirt with the sales tax included?

Page 7

Suppose you are deciding between two beds. If one costs \$480 and is on sale for 15% off and the other costs \$454 with a \$30 rebate, which bed is the better deal? Include the 5% sales tax.

Suppose there are two stores. One sells \$85 designer jeans with a \$20-off coupon, and the other sells \$72 designer jeans during a 10%-off sale. If you include the 4.5% sales tax, which jeans are more expensive?

Page 8

From the perspective of the manufacturer, which are better, coupons or rebates?

From the perspective of the retailer, which are better, coupons or rebates?

From the perspective of the customer, which are better, coupons or rebates?

Page 10

Fill in the following table with reasons manufacturers and stores offer coupons, sales, and rebates:

Coupons	Sales	Rebates



Name: _____

Date: _____

Answer the following questions using what you've learned from this lesson. Write your responses in the space provided.

The partially completed table below shows information for four different items that customers have purchased from retailers. For each of the items, the final amount the customer paid includes sales tax, but the final amount the retailer receives does not include sales tax, because retailers give the tax money to state and local governments. Using the example as a guide, fill in the missing information in the table.

	Full Price	Discount	Sales Tax Rate	Sales Tax Paid by Customer	Final Amount Paid by Customer	Final Amount Received by Retailer
Example	\$96.00	\$9.00 coupon	6%	\$5.76	\$92.76	\$96.00
1. Item A	\$38.00	20% sale	5%			
2. Item B		\$24.00 rebate	7%	\$4.62		
3. Item C	\$59.00	\$4.00 coupon		\$2.36		

4. Ivy wants to buy an electric guitar that has a full price \$980 plus a 6% sales tax. She received a coupon in the mail for \$50 off. The store has a special of 5% off, but no additional discounts are allowed.
- Find the total for both purchase options.
 - Which is the better offer, a 5%-off sale or a \$50 coupon?

5. John decided to get a new cell phone. The price advertisement is displayed below.

Regular price	\$449.99
Instant savings	-\$150.00
Mail-in Rebate	-\$100.00
New price	\$199.99
Requires new line or eligible upgrade with a 2-yr contract	

If the sales tax is 8.25%, how much does John have to pay for the phone at the store, before he sends in his mail-in rebate form?

6. What will John's total cost for the phone be once he receives the rebate from the manufacturer?
7. Bianca bought a couch for \$599 (before taxes), which included a \$150 manufacturer coupon. How much did the retailer receive in total from the sale of the couch?
8. Brandy decided to buy a new pair of running shoes that retail for \$119. If the store is currently running a promotion on all shoes for 25% off and the sales tax in her state is 6%, what is Brandy's total at checkout?
9. Jeremiah bought a GPS for his car for 35% off its full price. What was the full price of the GPS if Jeremiah paid \$168.61 before sales tax?
10. When purchasing ink for her printer, Mildred used a \$4.75 coupon, and she paid \$2.19 in sales tax. If the sales tax rate is 5% where Mildred lives, how much did she pay for the ink, including tax?



The questions below will help you keep track of key concepts from this lesson's study activity. Use the study page numbers listed to help you fill in the blanks or solve the problems.

Page 1

What is the definition of marketing?

Page 2

You decide to design a poll asking customers what kinds of cookies they would like to buy often and where they would like to see them, besides in the bakery. What sorts of questions might you ask? Write three questions of your own.

Page 3

What is the first P of marketing?

Page 4

What is the second P of marketing?

Write two places you would recommend Company C advertise its cookies.

Page 5

What is the third P of marketing?

What is advertising?

Page 6

Write down a recent purchase you made. It does not need to be significant.

What are the four different categories of purchases?

Write the definition of *impulse buying*.

What is a delayed purchase?

Page 7

Describe impulse buying and delayed purchases.

Page 8

Design your ad for Company C's repeat customers here:

Page 9

What is the fourth P of marketing?

Page 11

What are some external factors that affected your most recent purchase?

What are some of the internal factors that affected your most recent purchase?

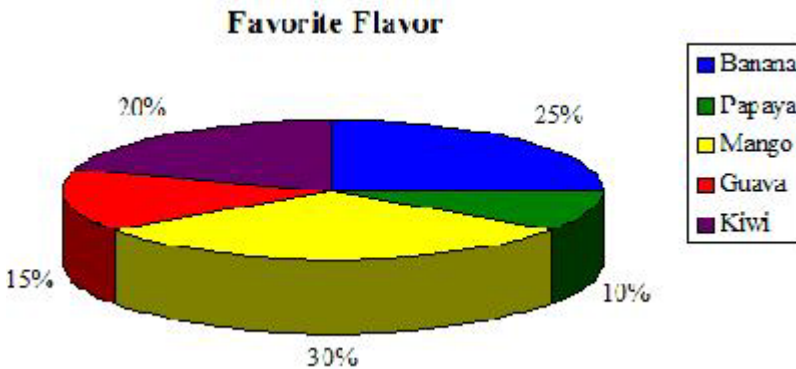


Name: _____

Date: _____

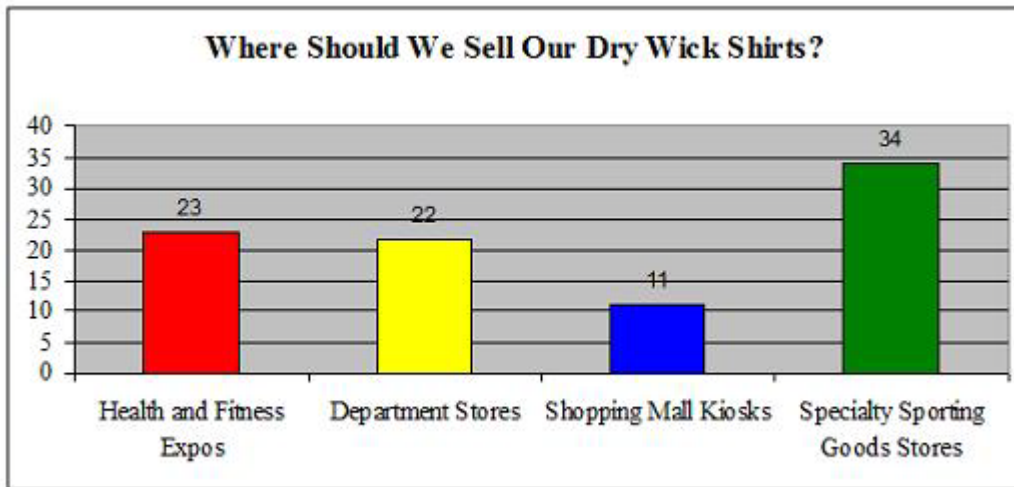
Answer the following questions using what you've learned from this lesson. Write your responses in the space provided.

A smoothie shop chose 120 customers at random and asked each of them to name a favorite flavor. The results are summarized in the pie chart below.



1. How many of the 120 customers preferred guava?
2. How many preferred mango?
3. How many preferred kiwi?
4. According to a tissue company's advertising campaign, 7 out of 8 people prefer the company's tissues to any other brand. If this is true, how many out of 392 people prefer the company's tissues to any other brand?
5. Elaine just ran out of hair gel, so she went to the drugstore and picked up some more. For Elaine, the hair gel was most likely what type of purchase?
6. Name the 4Ps of marketing.
7. Fill in the blanks. Kirk went to a convenience store to buy some hot dogs and iced tea, and while he was waiting in line at the cash register, he also picked up a prepaid calling card and some peanuts. The impulse purchases were the _____ and the _____.

An athletic apparel company surveyed 50 potential customers to see where they would like the company's new dry wick shirts sold. Respondents were given the following four locations and asked to choose as many as they liked: health and fitness expos; department stores; shopping mall kiosks; and specialty sporting goods stores. The results are summarized in the bar graph below, with the number of times each location was chosen noted above the corresponding bar.



8. What percentage of the potential customers wants the dry wick shirts sold at health and fitness expos?
9. What percentage wants the shirts sold at specialty sporting goods stores?
10. What was the average number of locations chosen per potential customer?



Name: _____

Date: _____

The questions below will help you keep track of key concepts from this lesson's study activity. Use the study page numbers listed to help you fill in the blanks or solve the problems.

Page 1

What is a credit card?

Page 2

What is a minimum monthly payment?

What is the typical minimum monthly payment?

What is a billing cycle?

How long is an average billing cycle?

What is a grace period?

What is a finance charge?

Page 3

What is the Federal Truth in Lending Act?

What are three things the act mandates that credit card companies disclose before you open an account?

Page 5

What is the connection between APR and compounding?

What is the end-of-the-year balance of the card that started with \$1000 and uses monthly compounding?

What about the one that uses daily compounding?

Page 6

What is effective interest rate?

How are the APR and effective interest rate of a credit card similar to APR and APY in a savings account?

Page 7

What information do you need in order to figure out which of two credit cards has a better APR?

What is the formula for calculating effective interest rate from APR?

What is the effective interest rate of National Bank? Show your work.

What is the effective interest rate of ABC Bank? Show your work.

Page 9

If you have a credit card with 29.68% APR that compounds daily, what is the effective interest rate?

If you have a credit card with 15.99% APR that compounds monthly, what is the effective interest rate?

If you have a credit card with 12.99% APR that compounds daily, what is the effective interest rate?

Page 11

What is periodic interest rate?

What is the formula for calculating periodic interest rate?

If you have an account with 31.99% APR, what is the periodic interest rate for February, June, and March?



5.4.2 Checkup: Practice Problems

Checkup

Mathematics of Personal Finance Sem 1 (S1138480)

Name: _____

Answer the following questions using what you've learned from this lesson. Write your responses in the space provided.

1. A credit card had an APR of 17.78% all of last year and compounded interest daily. What was the credit card's effective interest rate last year?
2. A credit card had an APR of 23.83% all of last year and compounded interest monthly. What was the credit card's effective interest rate last year?
3. Suppose a credit card has an APR of 22.41% and changes its compounding period from daily to monthly. What will happen to the effective interest rate charged by the credit card?
4. Suppose a credit card has an APR of 30.07% and changes its compounding period from monthly to daily. What will happen to the effective interest rate charged by the credit card?
5. The minimum monthly payment for Brian's credit card is 3.5% of his balance or \$25, whichever is higher. If Brian's balance at the end of his last billing cycle was \$722, what is his minimum monthly payment?
6. A credit card has an APR of 32.47%, and its billing cycle is 30 days long. What is the credit card's periodic interest rate?
7. Melissa has an offer from a credit card issuer for 0% APR for the first 60 days and 28.49% APR afterward, compounded daily. What effective interest rate is Melissa being offered?
8. Credit card A offers an APR of 15.55%, compounded monthly, while credit card B offers an APR of 15.48%, compounded daily. All else being equal, which card offers the better deal for the consumer?
9. If the billing cycle length for a credit card is one calendar month, which month of the year has the smallest periodic interest rate? Explain your answer.
10. Angel's credit card has an APR of 15.32% and a grace period of 25 days, and Angel pays her balance in full every month. If her last billing cycle ended on September 26, and she made a purchase on September 29 and her payment on October 11, how much interest did she owe on her last statement's balance?



5.5.1 Study: Calculating Credit Card Interest

Study Sheet

Mathematics of Personal Finance Sem 1 (S1138480)

Name: _____

The questions below will help you keep track of key concepts from this lesson's study activity. Use the study page numbers listed to help you fill in the blanks or solve the problems.

Page 3

Where do most banks get the text to explain their calculations of interest?

Page 4

What are the three main methods to calculate interest on credit cards?

Page 7

What is the average daily balance method?

Does the average daily balance method take into account current purchases and payments?

Page 8

What is the previous balance method?

What is one potential benefit of the previous balance method? When would it benefit the credit card owner?

Page 10

What is the adjusted balance method?

How is adjusted balance different from average daily balance and previous balance?

Page 11

Give a brief explanation why the adjusted balance method produces the least interest per cycle and why the previous balance method produces the greatest.



Answer the following questions using what you've learned from this lesson. Write your responses in the space provided.

The opening balance of one of Herb's 30-day billing cycles for his credit card was \$1220, and it remained that amount for the first 10 days of his billing cycle. He then made a purchase for \$470, so his balance jumped to \$1690, and it remained that amount for the next 10 days. Herb then made a payment of \$350, so his balance for the last 10 days of the billing cycle was \$1340. The APR of Herb's credit card is 33%.

1. What was Herb's average balance for the month?
2. What is his periodic interest rate?
3. If Herb's credit card uses the average daily balance method, how much was Herb charged in interest for the billing cycle?
4. If Herb's credit card uses the previous balance method, how much was Herb charged in interest for the billing cycle?
5. If Herb's credit card uses the adjusted balance method, how much was Herb charged in interest for the billing cycle?

The opening balance of one of Eva's 30-day billing cycles for her credit card was \$2310, and it remained that amount for the first 10 days of her billing cycle. She then made a payment of \$760, so her balance went down to \$1550, and it remained that amount for the next 10 days. Eva then made a purchase \$590, so her balance for the last 10 days of the billing cycle was \$2140. The APR of Eva's credit card is 21%.

6. What was Eva's periodic interest rate?
7. What was Eva's average balance for the billing period?
8. If Eva's credit card uses the average daily balance method, how much was Eva charged in interest for the billing cycle?
9. If Eva's credit card uses the previous balance method, how much was Eva charged in interest for the billing cycle?
10. If Eva's credit card uses the adjusted balance method, how much was Eva charged in interest for the billing cycle?



5.6.1 Study: Tracking Payments and Purchases

Mathematics of Personal Finance Sem 1 (S1138480)

Name: _____

The questions below will help you keep track of key concepts from this lesson's study activity. Use the study page numbers listed to help you fill in the blanks or solve the problems.

Page 3

What are the four scenarios you will be studying in this lesson?

Page 4

End of month	Previous balance	New charges	Payment received	Interest paid	Principal paid	New balance
1	0	1300	0	0	0	1300
2	1300	0	26	19.50	6.50	1293.50
3	1293.50	0	25.87	19.40	6.47	1287.03
4						
5						
6						
7						

Page 6

Explain why making the minimum payment leads to paying the most interest.

Page 7

End of month	Previous balance	New charges	Payment received	Interest paid	Principal paid	New balance
1	0	1300	0	0	0	1300
2	1300	0	26	19.50	6.50	1293.50
3	1293.50	0	25.87	19.40	6.47	1287.03
4						
5						
6						
7						

Page 9

End of month	Previous balance	New charges	Payment received	Interest paid	Principal paid	New balance
1	0	1300	0	0	0	1300
2	1300	0	200	19.50	180.50	1119.50
3	1119.50	0	200	16.79	183.30	936.20
4						
5						
6						
7						

Page 11

End of month	Previous balance	New charges	Payment received	Interest paid	Principal paid	New balance
1	0	1300	1300	0	1300	0
2	0	0	0	0	0	0
3	0	0	0	0	0	0
4						
5						
6						
7						



Answer the following questions using what you've learned from this lesson. Write your responses in the space provided.

Dudley's credit card has an APR of 20.7%, calculated on the previous monthly balance, and a minimum payment of 2%, starting the month after the first purchase. His credit card record for the last 7 months is shown in the table below.

End of Month	Previous Balance	New Charges	Payment Received	Finance Charges	Principal Paid	New Balance
1	\$0.00	\$6300.00	\$0.00	\$0.00	\$0.00	\$6300.00
2	\$6300.00	\$0.00	\$126.00	\$108.68	\$17.33	\$6282.68
3	\$6282.68	\$0.00	\$125.65	\$108.38	\$17.28	\$6265.40
4	\$6265.40	\$0.00	\$125.31	\$108.08	\$17.23	\$6248.17
5	\$6248.17	\$0.00	\$124.96	\$107.78	\$17.18	\$6230.99
6	\$6230.99	\$0.00	\$124.62	\$107.48	\$17.14	\$6213.85
7	\$6213.85	\$0.00	\$124.28	\$107.19	\$17.09	?

1. What is the total amount that Dudley has paid in interest over the 7 months?
2. What is the total amount that Dudley has made in payments over the 7 months?
3. How much of the \$6300 charge that Dudley made during the first month has been paid off?

Kimberly's credit card has an APR of 28.6%, calculated on the previous monthly balance. Her credit card record for the last 7 months is shown in the table below.

End of Month	Previous Balance	New Charges	Payment Received	Finance Charges	Principal Paid	New Balance
1	\$0.00	\$476.00	\$0.00	\$0.00	\$0.00	\$476.00
2	\$476.00	\$178.00	\$44.77	\$11.34	\$33.43	\$620.57
3	\$620.57	\$67.00	\$332.19	\$14.79	\$317.40	\$370.18
4	\$370.18	\$93.00	\$130.06	\$8.82	\$121.24	\$341.94
5	\$341.94	\$231.00	\$84.85	\$8.15	\$76.70	\$496.24
6	\$496.24	\$48.00	\$219.43	\$11.83	\$207.60	\$336.63
7	\$336.63	\$335.00	\$488.52	\$8.02	\$480.50	\$?

4. What is Dudley's new balance at the end of month 7?
5. What will Dudley's payment be in month 8?
6. What is the total amount that Kimberly has paid in interest over the 7 months?
7. What is the total amount that Kimberly has made in payments over the 7 months?
8. How much of Kimberly's payments has gone to paying down the principal on her account?



5.7.1 Study: Comparing Credit Cards

Mathematics of Personal Finance Sem 1 (S1138480)

Name: _____

The questions below will help you keep track of key concepts from this lesson's study activity. Use the study page numbers listed to help you fill in the blanks or solve the problems.

Page 1

What are two things that might be better to pay cash for?

What are two things that might be better to put on credit?

Page 2

Copy the advantages and disadvantages from the slide into the chart below:

	CASH	CREDIT
Advantages		
Disadvantages		

Page 3

What are some of the unique advantages of a credit card over cash?

Page 4

What is APR?

What is the annual fee?

What are some perks that a card might have?

Page 5

What is introductory APR?

How long does the introductory APR usually last?

End-of-the-year balance of card 1:

End-of-the-year balance of card 2:

End-of-year-two balance of card 1:

End-of-year-two balance of card 2:

Page 7

What is the formula for future value?

Suppose your credit is good and you get the 0% introductory rate for 10 months and 12.99% APR subsequently. If you spend \$500 in January and wait until December to pay your balance, how much money do you owe? Show your work.

Page 9

What are some possible rewards?

Page 10

What are the perks of a student card?

Page 11

Why would you use a balance-transfer card?

Why do you think a bank would offer a balance transfer?

Page 13

Suppose you want to compare two cards. Card 1 has an APR of 6.9% and an annual fee of \$35, while card 2 has a standard APR of 9.9% and no annual fee.

At what balance do you think the two cards are equal?

Find the balance at which the two cards are equal.

Explain the significance of the number \$1080.46. If you plan on leaving \$800 unpaid, which card is the better choice? What if you plan on leaving \$3000 unpaid?



Name: _____

Date: _____

Answer the following questions using what you've learned from this lesson. Write your responses in the space provided.

Lester transferred a balance of \$900 to a new credit card at the beginning of the year. The card offered an introductory APR of 7.4% for the first 4 months and a standard APR of 24.3% thereafter. Lester made no payments or new purchases during the year, and he wasn't charged any late payment fees. The credit card compounds interest monthly.

1. What was Lester's balance at the end of the first 4 months?
2. What was Lester's balance at the end of the year?
3. How much money did the introductory APR save Lester?

Mildred has a balance of \$1530 on a credit card with an APR of 26.9%, compounded monthly. She has an offer to transfer her balance to a credit card with an APR of 20.1%, compounded monthly. Mildred will make no payments or new purchases during the course of the next year, and neither card will charge her any late payment fees.

4. What will Mildred's balance be in a year if she doesn't transfer her balance?
5. What will Mildred's balance be in a year if she does transfer her balance?
6. How much can Mildred save over the course of the next year if she transfers her balance?

Credit card A has an APR of 27.7% and an annual fee of \$80, while credit card B has an APR of 31.1% and no annual fee. Interest on both cards is compounded monthly, and the principal P on credit card A is equal to the principal P on credit card B.

7. If the principal P remains constant over the course of a year, what expression represents the balance on credit card A at the end of the year? Include the annual fee in the balance.
8. If the principal P remains constant over the course of a year, what expression represents the balance on credit card B at the end of the year?
9. All else being equal, what equation can be used to solve for the principal P for which the cards offer the same deal over the course of a year?
10. Use your equation from the previous question to solve for the principal P for which the cards offer the same deal over the course of a year.



5.8.1 Study: Credit Scores

Study Sheet

Mathematics of Personal Finance Sem 1 (S1138480)

Name: _____

Date: _____

The questions below will help you keep track of key concepts from this lesson's study activity. Use the study page numbers listed to help you fill in the blanks or solve the problems.

Page 2

Define the following terms:

Capacity

Character

Collateral

Describe some factors that would make someone more likely to repay a loan:

Page 3

What is the definition of credit score?

What is the range of credit scores and which is worst and best?

Page 4

What is FICO®?

What criterion makes up the largest percentage of the FICO score?

Page 5

What can damage a credit score most?

Page 6

What are three ways you can improve your credit score?

Page 7

Does most of the population have a credit score above 699 or below?

Page 9

Use the credit score table to calculate Jim's credit score.

Age	28
Time at address	5 years
Age of auto	none
Monthly auto payment	none
Housing costs	Lives with relatives
Checking and savings accounts	Both
Finance company reference	No
Major credit cards	1
Ratio of debt to income	No debts
Declared bankruptcy	Never

Page 10

Define the following term: credit rating.

Explain why you would prefer to loan money to someone who has an A+ rating as opposed to someone with a B+ rating.

Page 11

Why is it important to maintain a good credit score?

Page 12

What is the relationship between credit score and interest rate on a loan?



5.8.2 Checkup: Practice Problems

Checkup

Mathematics of Personal Finance Sem 1 (S1138480)

Name: _____

Answer the following questions using what you've learned from this lesson. Write your responses in the space provided.

The personal information for three different people is shown in the table below.

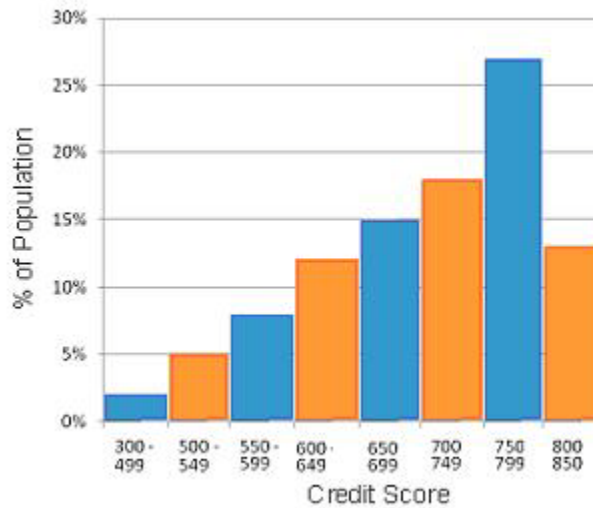
Name	Donna Dwyer	Kevin Kolb	Wayne Williams
Age	27	49	58
Time at address	2 years	4 months	12 years
Age of auto	3 years	None	5 months
Car payment	\$130	None	\$410
Housing costs	\$620	\$375	Owens clear
Checking and savings accounts	Checking only	Savings only	Both
Finance company reference	Yes	No	Yes
Major credit cards	1	None	4
Ratio of debt to income	18%	4%	7%
Declared bankruptcy	Never	Over 10 years ago	Never

Their credit scores can be determined by using the following table.

Age	under 25	25-29	30-34	35-39	40-44	45-49	50 or over
	48	20	0	4	72	88	124
Time at address	< 1 yr	1 yr	2-3 yrs	4-5 yrs	6-9 yrs	10+ yrs	
	36	0	20	0	20	48	
Age of auto	none	0-1 yrs	2 yrs	3-4 yrs	5-7 yrs	8+ yrs	
	0	48	64	52	12	0	
Car payment	none	<\$125	\$126-\$150	\$151-\$199	\$200+		
	72	24	4	16	0		
Housing costs	< \$274	\$275-\$399	\$400+	owns clear	lives w/relatives		
	0	40	48	48	96		
Checking and savings accounts	both	checking only	savings only	neither			
	60	8	8	0			
Finance company reference	yes	no					
	0	60					
Major credit cards	none	1	2 or more				
	0	20	60				
Ratio of debt to income	no debts	1%-5%	6%-15%	16% over			
	164	64	80	0			
Declared bankruptcy	never	in the last 10 years	over 10 yrs ago				
	102	0	24				

Use the following table and graph to answer the next 3 questions below.

% of Population	Credit Score
2%	300 - 499
5%	500 - 549
8%	550 - 599
12%	600 - 649
15%	650 - 699
18%	700 - 749
27%	750 - 799
13%	800 - 850



FICO Score	Interest Rate	Monthly Payment
720-850	5.59%	\$860
700-719	5.71%	\$872
675-699	6.25%	\$924
620-674	7.40%	\$1039
560-619	8.53%	\$1157
500-559	9.29%	\$1238

4. What percentage of the population has a credit score below 700?
5. An excellent credit score is considered to be 750 or above. What percentage of the population has an excellent credit score?
6. The most Jude can afford to pay per year in mortgage payments is \$14,000, and his credit score is currently 498. According to the above table for a \$150,000 mortgage, by how many points would he need to improve his credit score in order to take a mortgage for \$150,000?

Use the following table to answer the next 3 questions below.

Credit Event	FICO Score Damage to a Starting Score of 780
Apply for a store credit card	- 10 points
Take on a new \$30,000 car loan	- 15 points
Take on a new mortgage loan of \$350,000	- 15 points
Miss a payment on one account that wasn't already late	- 40-75 points
Miss the payments on <i>all</i> of your accounts this month	- 60-110 points
Max out <i>all</i> of your credit cards (Utilization percentage is now 100%)	- 50-100 points
File for bankruptcy	-195-255 points

7. Joanne's credit score was 780, but she just maxed out all of her credit cards. What's the highest Joanne's credit score could be now?
8. Clarence's credit score was 780, but he just missed a payment on one of his accounts that wasn't already late. What's the lowest Clarence's credit score could be now?
9. Belinda's credit score was 780, but she missed the payments on all of her accounts this month and applied for a store credit card. What range of possible credit scores could Belinda have now?
10. Joe's credit score is 733, while Anna's credit score is 688. According to the following table for a \$150,000 mortgage, how much more would Anna have to pay per month than Joe?

FICO Score	Interest Rate	Monthly Payment
720-850	5.59%	\$860
700-719	5.71%	\$872
675-699	6.25%	\$924
620-674	7.40%	\$1039
560-619	8.53%	\$1157
500-559	9.29%	\$1238



Name: _____

Date: _____

The questions below will help you keep track of key concepts from this lesson's study activity. Use the study page numbers listed to help you fill in the blanks or solve the problems.

Page 1

What is bankruptcy?

Page 2

What are the three most commonly applied for types of bankruptcy?
Briefly describe these types of bankruptcy.

Page 5

What are liquidated assets?

Page 6

What is a trustee?

Page 7

Is all debt forgiven when you have qualified for bankruptcy?

Page 8

Fill in the following table.

	Chapter 7	Chapter 13	Chapter 11
Years until removed from credit report			
Time to pay off debt			

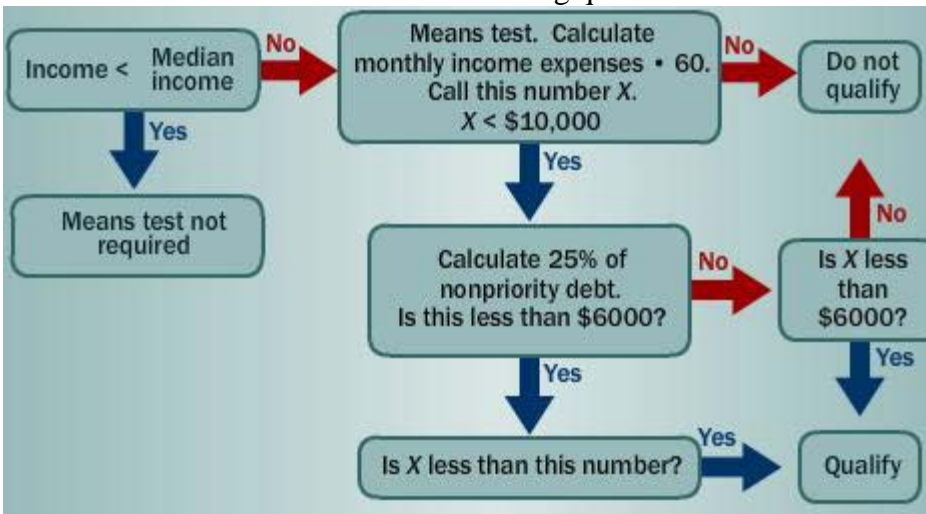


Answer the following questions using what you've learned from this lesson. Write your responses in the space provided.

The following table shows information for three different families.

	Annual Income	State of Residence	Median Annual Income of the State of Residence	Monthly Expenses
The Normans	\$53,621	Iowa	\$48,980	\$4278
The Perrys	\$62,957	Hawaii	\$67,214	\$5036
The Harrisons	\$56,887	Oregon	\$50,169	\$4591

Use the chart below to answer the following questions:



- Do the Normans qualify for Chapter 7 bankruptcy? Why or why not?
- Do the Perrys qualify for Chapter 7 bankruptcy? Why or why not?
- Do the Harrisons qualify for Chapter 7 bankruptcy? Why or why not?
- Willis filed for Chapter 7 bankruptcy when he was 47 years old. How old will he be when the bankruptcy is removed from his credit report?

5. Justine owes \$23,000 in student loans, \$10,000 in credit card debt, and \$400 in taxes. How much of her debts can be forgiven if she filed a Chapter 7 bankruptcy?
6. Henrietta's annual take-home pay is \$78,000. What is the maximum amount that she can spend per month paying off credit cards and loans and not be in danger of credit overload?
7. Jed takes home \$4800 per month from his job as a sanitation supervisor. If his only debt obligations are a car loan payment of \$705 and a credit card payment of \$210 every month, is he in danger of credit overload?
8. Phoebe takes home \$3500 per month from her job as a data technician. If her only debt obligations are a car loan payment of \$475 and a mortgage payment of \$785 every month, is she in danger of credit overload?
9. Olaf's only debt obligations are a car loan payment of \$422 and a credit card payment of \$110 every month. What is the minimum amount of money he must take home every month in order to avoid being in danger of credit overload?
10. Gilda filed for Chapter 13 bankruptcy in 2007. Even if she planned to take the maximum time allowed under Chapter 13 to repay her debts, she must have planned to repay them by no later than what year?



Name: _____

Date: _____

1. Clare lives in Iowa and pays 6% in sales tax. She just bought \$135 in groceries, but \$40 worth of those groceries were not taxable. What is the total amount that Clare paid for the groceries, including sales tax?

2. The fact that lower-income families will spend a higher percentage of their income on taxable items than higher-income families means that sales tax is what type of tax?

3. Tina decided to get a new cell phone. The price advertisement is displayed below.

Regular price **\$449.99**

Instant savings **-\$150.00**

Mail-in rebate **-\$100.00**

New price **\$199.99**

Requires new line or eligible
upgrade with a 2-yr contract

If the sales tax is 8.25%, how much does Tina have to pay for the phone at the store, before she sends in her mail-in rebate form?

4. Jaylen decided to buy a new digital camera that retails for \$119. If the store is currently running a promotion on all cameras for 25% off, and the sales tax in her state is 6%, what is Jaylen's total at checkout?

5. Name the 4Ps of marketing.

6. According to a dairy company's advertising campaign, 7 out of 8 people prefer the company's ice cream to any other brand. If this is true, how many out of 402 people prefer the company's ice cream to any other brand?

7. A credit card had an APR of 18.78% all of last year and compounded interest daily. What was the credit card's effective interest rate last year?

8. The minimum monthly payment for Jesse's credit card is 3.5% of his balance or \$25, whichever is higher. If Jesse's balance at the end of his last billing cycle was \$825, what is his minimum monthly payment?

9. A credit card has an APR of 32.47%, and its billing cycle is 30 days long. What is the credit card's periodic interest rate?

10. The opening balance of one of Jennie's 30-day billing cycles for her credit card was \$1220, and it remained that amount for the first 10 days of her billing cycle. She then made a purchase for \$470, increasing her balance to \$1690, where it remained for the next 10 days. Jennie then made a payment of \$350, so her balance for the last 10 days of the billing cycle was \$1340. The APR of Jennie's credit card is 33%. What is her periodic interest rate?

11. If Jennie's credit card uses the average daily balance method, how much was Jennie charged in interest for the billing cycle?

12. Elly's credit card record for the last 7 months is below. Based on the information from the table, what will be her new balance at the end of month 7?

End of Month	Previous Balance	New Charges	Payment Received	Finance Charges	Principal Paid	New Balance
1	\$0.00	\$2200.00	\$0.00	\$0.00	\$0.00	\$2200.00
2	\$2200.00	\$0.00	\$44.00	\$33.00	\$11.00	\$2189.00
3	\$2189.00	\$0.00	\$43.78	\$32.84	\$10.95	\$2178.06
4	\$2178.06	\$0.00	\$43.56	\$32.67	\$10.89	\$2167.16
5	\$2167.16	\$0.00	\$43.34	\$32.51	\$10.84	\$2156.33
6	\$2156.33	\$0.00	\$43.13	\$32.34	\$10.78	\$2145.55
7	\$2145.55	\$0.00	\$42.91	\$32.18	\$10.73	\$?

13. Patrick's credit card has an APR of 17%, calculated on the previous monthly balance, and a minimum payment of 2%, starting the month after the first purchase. His credit card record for the last 7 months is shown in the table below.

End of Month	Previous Balance	New Charges	Payment Received	Finance Charges	Principal Paid	New Balance
1	\$0.00	\$4400.00	\$0.00	\$0.00	\$0.00	\$4400.00
2	\$4400.00	\$0.00	\$88.00	\$62.33	\$25.67	\$4374.33
3	\$4374.33	\$0.00	\$87.49	\$61.97	\$25.52	\$4348.82
4	\$4348.82	\$0.00	\$86.98	\$61.61	\$25.37	\$4323.45
5	\$4323.45	\$0.00	\$86.47	\$61.25	\$25.22	\$4298.23
6	\$4298.23	\$0.00	\$85.96	\$60.89	\$25.07	\$4273.16
7	\$4273.16	\$0.00	\$85.46	\$60.54	\$24.93	\$4248.23

How much of the \$4400 charge that Patrick made in the first month has been paid off?

14. Olive transferred a balance of \$2600 to a new credit card at the beginning of the year. The card offered an introductory APR of 4.3% for the first 5 months and a standard APR of 13.7% thereafter. If the card compounds interest monthly, what is Olive's balance at the end of the year? (Assume that Olive will make no payments or new purchases during the year, and ignore any possible late payment fees.)

15. Travis just got a new credit card that offers an introductory APR of 3.6% for the first 3 months and a standard APR of 14.4% thereafter. If interest is compounded monthly, what is the periodic interest rate during the first 3 months?

16. Joanna's personal information is shown below:

Age	62
Time at address	14 years
Age of auto	4 years
Car payment	\$250
Housing costs	Owns Clear
Checking and savings accounts	Both
Finance company reference	Yes
Major credit cards	1
Ratio of debt to income	3%
Declared bankruptcy	Over 10 years ago

According to the following table, what is her credit score?

Age	under 25	25-29	30-34	35-39	40-44	45-49	50 or over
	48	20	0	4	72	88	124
Time at address	< 1 yr	1 yr	2-3 yrs	4-5 yrs	6-9 yrs	10+ yrs	
	36	0	20	0	20	48	
Age of auto	none	0-1 yrs	2 yrs	3-4 yrs	5-7 yrs	8+ yrs	
	0	48	64	52	12	0	
Car payment	none	<\$125	\$126-\$150	\$151-\$199	\$200+		
	72	24	4	16	0		
Housing costs	< \$274	\$275-\$399	\$400+	owns clear	lives w/relatives		
	0	40	48	48	96		
Checking and savings accounts	both	checking only	savings only	neither			
	60	8	8	0			
Finance company reference	yes	no					
	0	60					
Major credit cards	none	1	2 or more				
	0	20	60				
Ratio of debt to income	no debts	1%-5%	6%-15%	16% over			
	164	64	80	0			
Declared bankruptcy	never	in the last 10 years	over 10 yrs ago				
	102	0	24				

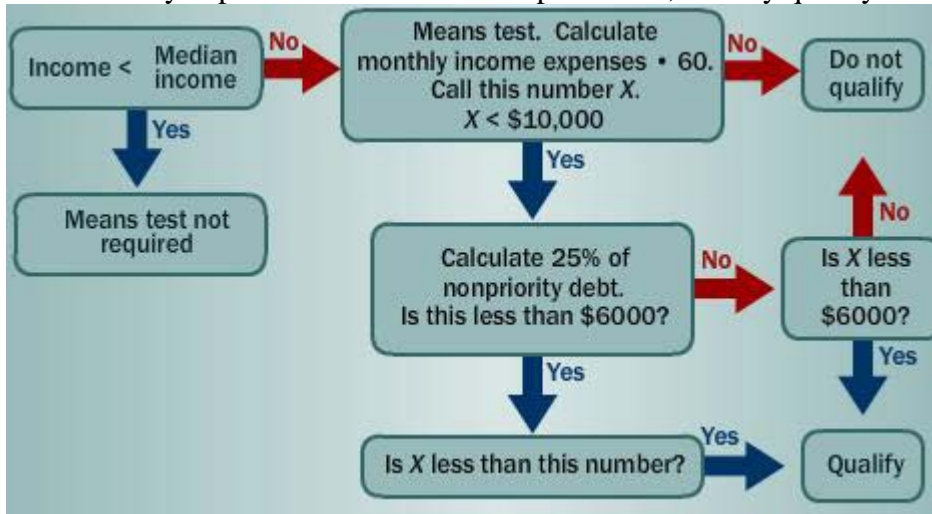
17. The most Lastrì can afford to pay per year in mortgage payments is \$13,900, and her credit score is 498. According to the following table for a \$150,000 mortgage, by how many points would she need to improve this credit score in order to take a mortgage for \$150,000?

FICO Score	Interest Rate	Monthly Payment
720-850	5.59%	\$860
700-719	5.71%	\$872
675-699	6.25%	\$924
620-674	7.40%	\$1039
560-619	8.53%	\$1157
500-559	9.29%	\$1238

18. Last time Francis checked, her credit score was 659. Since then, she applied for a store credit card and bought a new car. What is her new credit score? Use the table below.

Credit Event	FICO Score Damage to a Starting Score of 780
Apply for a store credit card	- 10 points
Take on a new \$30,000 car loan	- 15 points
Take on a new mortgage loan of \$350,000	- 15 points
Miss a payment on one account that wasn't already late	- 40-75 points
Miss the payments on <i>all</i> of your accounts this month	- 60-110 points
Max out <i>all</i> of your credit cards (Utilization percentage is now 100%)	- 50-100 points
File for bankruptcy	-195-255 points

19. Using the flowchart below, determine if the following family qualifies for bankruptcy. The Vanburens make \$58,000 a year and live in Oklahoma, which has a median annual income of \$47,778. If their monthly expenses amount to \$4600 per month, do they qualify for Chapter 7 bankruptcy?



20. Michelle's annual take-home pay is \$29,000. What is the maximum amount that she can spend per month paying off credit cards and loans and not be in danger of credit overload?