Pre-Algebra 8: Scattered Plots and Data

May 11 - 15

Time Allotment: 40 minutes per day

Student Name: _____

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Zoom Guided Instructions on Tuesdays and Thursdays

4th Period … 10AM

5th Period … 11AM

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Packet Overview

Date	Objective(s)	Page Number
Monday, May 11	**Lesson 6:** Be able to gain financial responsibility by using the following topics of advice: pay yourself first, live within your means, consider needs versus wants, save early and save often, use credit responsibly.	2-6
Tuesday, May 12	**Lesson 6 Continued:** Be able to gain financial responsibility by using the following topics of advice: pay yourself first, live within your means, consider needs versus wants, save early and save often, use credit responsibly.	7-9
Wednesday, May 13	**Review Lessons 1 – 6:** Be able to calculate interest, the cost of credit, the cost of college, and identify the methods of payments and financial responsibility.	10-11
Thursday, May 14	**Review Lessons 1 - 6:** Be able to calculate interest, the cost of credit, the cost of college, and identify the methods of payments and financial responsibility. ***Minor Assessment on Lessons 1 – 6 TOMORROW!!!**	12-14
Friday, May 15	***Minor Assessment on Lessons 1 - 6**	15 - 20

Additional Notes:

❖ **Materials:** Printed packet or notebook paper; pencils. **CALCULATORS may be used.**
  ➢ **Note:** If you are using notebook paper, be sure to write the pages and numbers of the material.
  ➢ **Example:** P. 4; #6) _____

❖ **Minor Assessment on Page 15 – 20**

❖ **Answer Key:** Pages 21 - 28

Academic Honesty

I certify that I completed this assignment independently in accordance with the GHNO Academy Honor Code.

I certify that my student completed this assignment independently in accordance with the GHNO Academy Honor Code.

Student signature:

Parent signature:

_____

_____

Pre-Algebra Unit: Financial Literacy

Unit Overview: Financial Literacy

It is time to *finish this LAST CHAPTER* covering simple and compound interest, the cost of credit, the cost of college, methods of payments, and financial responsibility. All math tasks are important, but ***these topics will be used regularly throughout your life***. The earlier you learn about these and apply them to your life, the better you will be financially!

Monday, May 11

Lesson 6: Financial Responsibility

Objective: Be able to gain financial responsibility by using the following topics of advice: pay yourself first, live within your means, consider needs versus wants, save early and save often, use credit responsibly.

➤ Hello! Read A – E carefully and use this information for the questions on the next few pages.

FINANCIAL RESPONSIBILITY

PART I: Hector's parents are always talking to him about being responsible with his money. Below are some common pieces of advice he has received. In the space given, elaborate on what each piece of advice means and/or how you could practically follow the advice.

A "Pay yourself ___first___"

Create a habit of automatically paying yourself by moving money into savings anytime you earn money

B "Live within your ___means___"
- Use a budget
- Reduce your expenses so that you have "extra" money at the end of each month to save
- Don't overspend

C "Consider needs vs. ___wants___"

Spend less by learning to distinguish when you are buying things because you need them or just because you want them. Don't always buy the "wants" unless it fits in your budget.

D "Save ___early___ and save ___often___"

Saving consistently and for long amounts of time can allow your money to grow. These savings can help you make larger purchases or may help during emergencies.

E "Use ___credit___ responsibly"

Use credit only when you know you can pay it off within a reasonable time. Pay off credit quickly to avoid continual interest charges.

PART II: Apply your knowledge of financial responsibility to answer each question.

1. Blaine's take home pay is $2,500 each month, and he has created a budget to become more aware of where his money goes.

CATEGORY	AMOUNT
Rent + electricity/bills	$990
Food/groceries	$525
Gas + insurance	$320
Spending money	$235
Cell phone + internet	$250
Gym membership	$180

TOTAL (handwritten)

a. What advice would you give Blaine concerning his budget? *Hint His car breaks down. does he have any extra money?* (handwritten)

b. Blaine can join a cheaper gym for $40/month, reduce his spending money to $200, and can find a phone and internet package for $175. How much will these choices save him each month, and what will that amount to after a year?

① New total — TOTAL (handwritten)
ⓐ #① times 12 months (handwritten)

SHOW YOUR WORK 😊!

2. Paul wants to buy a $8,000 truck for his business. He has $6,200 in savings and can finance the rest at 4.7% interest. What advice would you give Paul, and what factors should he consider as he tries to make a financially wise decision?

Well, does he need it immediatly? (handwritten)

If not, then he could save the rest and avoid interest (handwritten)

Will he make extra money with that new truck? (handwritten)

Maybe that will cover the interest and be worth it (handwritten)

3. Valerie works at a bank and advises homeowners to make sure their mortgage payment doesn't exceed 30% of their monthly take home pay. Find the maximum mortgage payment someone with the following take home amounts can afford by Valerie's guidelines. Then, explain how these guidelines can encourage financial responsibility.

	TAKE HOME PAY	MAXIMUM MONTHLY MORTGAGE
1)	$2,000	$600/month
2)	$3,000	
3)	$4,000	
4)	$5,000	

1) 30% of 2,000

$$\frac{30}{100} \times 2,000$$

.30 × 2,000

$600

2)

3)

4)

4. Adrian wants to build his savings by saving 10% of the paychecks he receives each week. For each paycheck, list what amount Adrian should save to meet his goal. Is Adrian's behavior financially responsible? Explain.

PAYCHECK	AMOUNT SAVED
$187.50	
$141.72	
$155.33	
$170.60	

Great idea, Adrian! Show your work!

5. Christian's bank account has a balance of $86.50. He is shopping with friends and has picked out a hat for $24.99 and a pair of shoes for $56.00. The sales tax rate is 8.75%.

a. What will the total amount of his purchase be, including sales tax?

b. Would using his debit card for the purchase be a financially wise decision? Explain, including any advice you would give to Christian. Sure, if he is stuck living alone outside in a desert and he needs shoes and a hat to survive

a) 24.99
  + 56.00
  _____
  $80.99

8.75% of 80.99

.0875 × 80.99

$7.09 tax

$80.99
+ 7.09
_____

6. Reynaldo has taken out two loans to purchase a car and a boat that he loves to use on the weekends with friends. Last month the boat had an expensive part that needed to be replaced and Reynaldo was late on his loan payment. This month, he had an emergency medical expenses and had to pay his car payment late. Is Reynaldo's behavior financially responsible, and how might it cost or benefit him in the future?

7. Candace uses a credit card for her rent and gas expenses. She pays the total balance off at the end of each month, and she earns 1% cash back on every dollar she spends. Candance usually uses the cash back to help pay for gifts for her kids on their birthdays. Is Candace's use of her credit card financially responsible? Explain.

8. Gus plans to attend college, but he will need to take out student loans. He wonders if taking out a loan for school is financially responsible. What advice would you give to Gus, and what should he consider when looking at loans?

➢ It is very important to think about money. Reynaldo didn't plan for things that might happen and make sure that he had extra money.
➢ Be sure to check your answers!

Tuesday, May 12

Lesson 6 Continued: Financial Responsibility

Objective: Be able to gain financial responsibility by using the following topics of advice: pay yourself first, live within your means, consider needs versus wants, save early and save often, use credit responsibly.

➢ Welcome back! Try these on your own!

FINANCIAL RESPONSIBILITY

PART I: Read each situation below, and then circle the choice that you feel is the most financially responsible. In the last column, explain why you believe it is the financially responsible choice.

SITUATION	CHOICES	EXPLANATION
1. James is shopping for hiking boots for a trip he will take in 3-months. He has $150 saved and is saving $20/week. The boots he wants are normally $240, but are on sale this weekend for 20% off. Should James...	a. Use his savings to buy the shoes now and put the amount he is short on a credit card b. Wait until he has enough saved and buy the shoes later at full price with his savings	
2. Skylar has a part-time job and makes about $350 each month. She needs to save to help pay for her first car in a few years. Should Skylar...	a. Set up a direct deposit for a set amount to go to her savings account on her paydays b. Wait until the end of each month, see how much she has left from her paycheck, and save that amount	
3. Krista has $8,000 in savings and saves $250 each month. She wants to buy a used car for $10,200 because it has nicer features than her current car. Should Krista...	a. Use her $~~7,000~~ 8,000 towards the car and finance the $~~5,200~~ 2,200 at a 4% interest rate b. Continue to save $250 each month until her savings is enough to buy the car	

4. The Johnson's want to move into a neighborhood where several of their friends live, but they would have to use the amount they currently save each month to pay for the mortgage. Should the Johnson's...	a. Buy the house to enjoy being close to friends and spend carefully until one spouse gets a raise at work b. Buy a home within their budget in a different area and continue to add to their savings each month

PART II: The table below lists the behavior of several individuals. Decide if you think the behavior or decision was financially responsible, and explain why.

SITUATION	FINANCIALLY RESPONSIBLE?
5. Bailey earned $210 last month. She used $150 to pay for concert tickets, $35 for dinner before the concert, and $25 to pay the minimum payment on her credit card balance of $300.	
6. Igor is in high school and got a part time job. With every paycheck, he has decided 10% will go to short term savings, 20% to long term savings, and the rest he will use for his current expenses and spending.	
7. Liliana downloaded the app that her bank offers. She created a username and password so when she's about to make a purchase she can use her phone to check her account balances.	
8. Nathaniel loves to help people, and he often lends money to friends in need. He knows that he can worry about bigger expenses later and shouldn't stress in the meantime.	

9. Emma has $7,000 in savings and needs to purchase a $8,500 car. She is currently saving $150 each month. She uses her savings and finances the rest of the purchase. The loan she received is 0% interest for the first 12 months.	
10. Jose needs to buy a laptop for $900 and he currently has $720 in savings. The laptop is on sale for 25% off this weekend, but Jose waits to purchase it because he still has 6 months until he needs the laptop.	

➢ Don't forget to check and correct.

Wednesday, May 13

Review Lessons 1 – 6: Financial Literacy

Objective: Be able to calculate interest, the cost of credit, the cost of college, and identify the methods of payments and financial responsibility.

➢ Start the review questions on the next page!
➢ **Minor Assessment (Quiz) on FRIDAY!!!**
➢ **SHOW WORK!**

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PERSONAL FINANCIAL LITERACY STUDY GUIDE

Solve each of the problems below. Be sure to ask questions if you need more help with a topic.

I CAN CALCULATE SIMPLE AND COMPOUND INTEREST EARNINGS. 8.12D

1. An investment of $600 is made into an account that earns 6.5% annual simple interest for 15 years. Assuming no other deposits or withdrawals are made, find the following:

Interest Earned: _____

Value of Account: _____

2. An investment of $11,000 is made into an account that earns 4.25% annual compound interest for 30 months. Assuming no other deposits or withdrawals are made, find the following:

Interest Earned: _____

Value of Account: _____

3. Nadia deposited $3,000 into an account that earns annual simple interest. After 6 years, she had earned $990 in interest. What was the interest rate of the account?

_____

4. Darryl made a deposit into an account that earns 7% annual compound interest. After 36 months, the value of his account was $1,041.29. What was the approximate amount of Darryl's initial deposit?

_____

5. Rex deposited $900 into an account that earns 4% simple interest. How many years will it take for the value of the account to reach $1,800?

_____

I CAN COMPARE SIMPLE AND COMPOUND INTEREST EARNINGS. 8.12D

6. Use what you know about simple and compound interest earnings to fill in each blank:

- Simple interest is calculated on the _____ amount only.

- Compound interest is calculated on the _____ amount plus any previous _____ earned.

7. Adrienne and her brother John each inherit $7,000 that they use to open savings accounts with. Adrienne's account earns 4.7% annual compound interest and John's account earns 4.7% annual simple interest. Neither makes any additional deposits or withdrawals for 10 years.

a. Who's account will be worth more at the end of 10 years? _____

b. How much more will the account be worth? _____

I CAN EXPLAIN HOW SMALL AMOUNTS OF MONEY GROW OVER TIME. 8.12C

8. Mel decides to start depositing $75 each month into an interest earning savings account. She does not make any additional deposits or withdrawals.

a. After 10 years, how much will Mel have contributed to the account?

b. According to her online calculations, the balance of Mel's account will be $12,352.41. Is this more or less than what she contributed, and why?

9. Is the graph below more likely to show the value of an account that earns simple interest or compound interest? Explain your choice.

10. Describe how the following factors affect your money's ability to "grow over time":

• Interest rate:

_____

_____

• Time:

_____

_____

I CAN CALCULATE THE TOTAL COST OF CREDIT. 8.12A, 8.12B

11. Jackie took out a $9,000 personal loan with a 4.5% interest rate that she will pay back in 3 years. She will make monthly payments of $267.72. Calculate the total cost of repayment and the total interest Jackie will pay.

Total repayment: _____

Interest: _____

12. Marvin is paying off a $6,800 loan that he took out for his new business. The loan has a 5.2% interest rate and Marvin will pay it off in 5 years by making monthly payments of $128.95. Find the total cost of repayment and the interest Marvin will pay on his loan.

Total repayment: _____

Interest: _____

13. Jessie is taking out a $32,000 loan for a new car at an interest rate of 4.2%. He is deciding between the following terms:

• 3-Year Term → Monthly Payments: $948
• 5-Year Term → Monthly Payments: $592

Which term will result in the lowest total repayment?

How much less interest would Jessie pay?

14. Hilda is taking out an $11,000 personal loan that she will repay in 5 years. If she receives a 10% interest rate, her monthly payments will be $233.72. If she receives an 18% interest rate, her monthly payments will be $279.33.

How much less interest will Hilda pay in interest if she qualifies for the lower interest rate?

Thursday, May 14

Review Lessons 1 – 6 Continued: Financial Literacy

Objective: Be able to calculate interest, the cost of credit, the cost of college, and identify the methods of payments and financial responsibility.

- ➢ Continue with these review questions!
- ➢ **Minor Assessment (Quiz) on FRIDAY!!!**
- ➢ **SHOW WORK!**

I CAN ESTIMATE THE COST OF COLLEGE AND DEVISE A SAVINGS PLAN.   8.12G

15. Darnell researched the public university he wants to attend to estimate the cost of attending.

a. What should Darnell estimate the total cost of one year to be?

TUITION & FEES	$8,000
ROOM & BOARD	$9,100
BOOKS & SUPPLIES	$950
TRANSPORTATION, ETC	$650

b. Darnell's family can contribute 60% of the total annual expenses (before financial aid), and Darnell estimates that he will qualify for $6,000 in scholarships and grants for his first year. How much does that leave for Darnell to cover for his first year of college?

c. If Darnell has 18 months to save, how much should he save each month?

16. Leah predicts that she will need to contribute $7,000/year for her college tuition. She already has $4,000 in savings, and the table shows the total value she will have in her account at the end of 4 years depending on how much she deposits.

If Leah wants enough after 4 years to cover her contribution for the first two years of college, what is the minimum amount she should deposit each month?

STARTING VALUE	MONTHLY DEPOSIT	END VALUE (4 YEARS)
$4,000	$100	$9,602
$4,000	$150	$12,149
$4,000	$200	$14,696
$4,000	$250	$17,242

17. There are many forms of financial aid to help pay for college. What is the main difference between student loans and grants or scholarships?

I CAN EXPLAIN THE ADVANTAGES AND DISADVANTAGES OF DIFFERENT PAYMENT METHODS. 8.12E

Each of the following describes an advantage of using a certain method of payment. Fill in the blank to identify which method of payment it describes (cash, credit card, debit card or online banking).

_____ 18. Allows you to transfer money, make deposits or pay bills from home.

_____ 19. Allows you to prove you are trustworthy and capable of repaying loans.

_____ 20. Allows you to "feel" your spending and possibly stay within your budget better.

_____ 21. Allows you to purchase things conveniently and requires a special security code.

22. Your younger brother has heard that credit cards are bad and you shouldn't use them. How would you respond? What advantages to credit cards could you inform your brother about?

I CAN EXPLAIN THE ADVANTAGES AND DISADVANTAGES OF DIFFERENT PAYMENT METHODS. 8.12E

Each of the following describes a disadvantage of using a certain method of payment. Fill in the blank to identify which payment of payment it describes (cash, credit card, debit card or online banking).

_____ 23. Your way of tracking spending is by keeping your receipts.

_____ 24. Susceptible to hacking and identify theft.

_____ 25. You will be charged interest if your balance isn't paid off in full at the end of the month.

_____ 26. You may be charged overdraft fees if you try to spend more than is currently in your account.

I CAN IDENTIFY FINANCIALLY RESPONSIBLE AND IRRESPONSIBLE DECISIONS. 8.12F

27. Henley's take home pay is $3,300 each month. Henley wants to make a budget for herself and has decided what percent of her income should go towards each part of her budget. Complete the budget by writing the actual dollar amounts in the blank row of the table:

HOUSING	TRANSPORTATION	FOOD	PHONE/INTERNET	SPENDING	GIFTS	SAVINGS
30%	15%	15%	7%	15%	8%	10%

28. Henley has thought about buying a new car, but her car payment would require 10% of her budget. Henley would use the 10% she is putting in savings for her car payment. Would you advise Henley to buy the new car? If not, explain other options Henley could consider.

29. Henley wants to buy a laptop for $1,100. She currently has $110 in savings. Assuming she continues to save 10% of her take home pay each month, how many months will it take for Henley to have enough for the laptop?

30. Henley uses her credit card for her spending category. Last month she used it for the purchases shown in the table.

a. How much over/under did Henley spend for the month?

b. Describe if her behavior is financially responsible, and explain some potential costs or benefits of her behavior.

DESCRIPTION	COST
Clothing	$175.80
Cell phone cover	$38.25
Make-up	$65.33
Coffee table	$215
Movies and music	$47

➤ Great. Be sure to *check and correct* your answers.
➤ **Minor Assessment tomorrow** so make sure that you **UNDERSTAND** the material and **MEMORIZE** the needed topics.

Friday, May 15

Lessons 1 – 6 Continued: Financial Literacy Minor Assessment

Objective: Be able to calculate interest, the cost of credit, the cost of college, and identify the methods of payments and financial responsibility.

➤ It is Friday!
➤ You need a pencil and a calculator! Nothing else.

PERSONAL FINANCIAL LITERACY UNIT TEST

Solve the problems below, and be sure to show all work.

1. Sophia invests $12,350 in an account that earns 4.5% annual simple interest. Assuming she makes no additional deposits or withdrawals, how much interest will Sophia earn after 36 months? _____	2. Liam plans to start depositing $175 each month into an interest earning savings account. According to his online calculations, the balance of the savings account in 5 years will be about $12,100. How much of the final balance will come from interest earned? A. $10,500 B. $1,600 C. $875 D. $2,300

3. Arthur took out a $12,000 personal loan. The monthly payments required based on the length of the term are shown in the table. Which is a true statement about Arthur's repayment of the loan?

TERM	MONTHLY PAYMENTS
3 years	$370.53
5 years	$237.61

A. Arthur will pay about $1,339 less in interest if he chooses the 3-year loan.
B. Arthur will pay about $2,257 more in interest if he chooses the 5-year loan.
C. Arthur will pay about $918 less in interest if he chooses the 3-year loan.
D. Arthur will pay about the same amount in interest regardless of which loan length he chooses.

4. Esther estimates that she will need about $8,600 for the first year of tuition at college. Her grandparents contribution will cover 65% of the tuition expenses, and Esther will need to save to pay for the rest. If Esther has 2 years to save, what is the minimum amount that she should save each month?

A. $125.42
B. $232.92
C. $161.25
D. $98.72

5. Which of the following does not describe an advantage of having and/or using a credit card?

A. You can potentially earn rewards while using your credit card.

B. Credit cards can allow you to build good credit by making your payments on time.

C. Credit cards can be helpful in the case of emergencies.

D. Credit cards can help you stay within budget since you can't spend more than what's in your linked bank account.

Solve the problems below, and be sure to show all work.

6. Julio invests $6,100 into an account that earns 5.2% annual compound interest. If Julio makes no additional deposits or withdrawals, which best represents the amount of interest Julio will earn after 8 years?

A. $3,050.73
B. $9,150.73
C. $15,250.73
D. $2,120.73

7. Which type of interest can be described as interest that is earned on the principal amount only?

A. Compound interest
B. Simple interest
C. Both simple and compound interest
D. Neither simple nor compound interest

8. Hunter took out a $3,500 loan with interest to pay for some business supplies. He will repay the loan in 3 years with monthly payments of $109.68.

Find the total amount of Hunter's repayment as well as the amount he will pay in interest.

Total repayment: _____

Interest: _____

9. Camille invested $3,000 into an account that earned annual simple interest. She made no additional deposits or withdrawals, and after 9 years she had earned $1,755 in interest. What was the interest rate of the savings account?

A. 3.5%
B. 4.25%
C. 5.9%
D. 6.5%

10. Mickey has $4,500 in a college savings account, and he will need to contribute $6,000 each year towards his college tuition. Mickey wants to save enough in 3 years to cover his first 2 years of tuition. According to the table, what is the minimum monthly deposit that Mickey should make in order to meet his goal?

STARTING VALUE	MONTHLY DEPOSIT	VALUE IN 3 YEARS
$4,500	$150	$10,799
$4,500	$200	$12,709
$4,500	$250	$14,618
$4,500	$300	$16,527

A. $150   B. $200   C. $250   D. $300

11. Kim's personal loan of $8,000 will be paid off in 5 years, but she doesn't know if she will be approved for a 6% or 12% interest rate. Her monthly payments based on the interest rate are shown:

- 6% Rate→ Payments of $154.66/month
- 12% Rate → Payments of $177.96/month

How much more will Kim pay in interest at the end of 5 years if she does not get approved for the 6% interest rate?

A. $116.50   C. $1,398
B. $1,279.60   D. $2,677.60

12. Which of the following does not describe a behavior that demonstrates financial responsibility?

A. Making only the minimum payment on a credit card bill each month

B. Setting aside a percentage of your paycheck each month for savings

C. Looking for a credit card with the lowest possible interest rate

D. Checking your account balance before making purchases

Solve the problems below, and be sure to show all work.

13. Chris in considering living at home for his Freshman year of college in order to take some of his basic classes. According to the expenses in the tables below, how much would Chris save his first year if he stays home and attends the 2-year community college instead of the 4-year public university?

4-YEAR PUBLIC UNIVERSITY	
Tuition & Fees	$8,500
Room & Board	$6,700
Books & Supplies	$1,250
Misc. Expenses	$600

2-YEAR COMMUNITY COLLEGE	
Tuition & Fees	$4,400
Room & Board	$0
Books & Supplies	$1,200
Misc. Expenses	$800

14. Which is typically true regarding loan repayments?

A. The higher interest rate you receive, the lower the total repayment.

B. The quicker you pay off the loan, the lower the total repayment.

C. The quicker you pay off the loan, the higher the total repayment.

D. The time you take to pay off the loan does not affect the total amount of repayment.

15. Which form of financial aid can students use to help pay for their college education without having to eventually repay the financial aid received?

A. Work-study earnings

B. Scholarships

C. Grants

D. All of the above

16. Faye has $5,000 that she is going to deposit into two accounts as shown:

ACCOUNT	DEPOSIT	INTEREST TYPE	INTEREST RATE
#1	$2,000	Simple	5%
#2	$3,000	Compound	4%

Assuming that Faye does not make any additional deposits or withdrawals, find the combined amount of her two accounts after 15 years.

17. Kade has $45 in savings and wants to purchase a video game console for $250. He has a coupon for 10% off, and sales tax is 8.25%. In order to be financially responsible, Kade wants to wait until he has enough in savings to not have to borrow money. If Kade is able to save $45 each week, what is the minimum amount of weeks Kade should save before making his purchase?

A. 3 weeks   B. 4 weeks   C. 5 weeks   D. 7 weeks

Solve the problems below, and be sure to show all work.

18. Jameson and Quincy each deposit $7,000 into accounts that earn 6% interest, but Jameson earns annual simple interest while Quincy earns annual compound interest. Assuming neither one of them makes any deposits or withdrawals for 60 months, which of the following is a true statement?

A. Jameson will have about $2,100 more in his account than Quincy.

B. Jameson will have about $9,367.58 less in his account than Quincy.

C. Jameson will have about $267.58 less in his account than Quincy.

D. Jameson will have about $2,367.58 more in his account than Quincy.

19. A group of friends sets a goal to live within their means by not letting their car payments exceed 10% of their monthly income amounts. The table below shows the income and car payments of each person.

NAME	MONTHLY INCOME	CAR PAYMENT
Allie	$2,600	$275
Benicio	$3,100	$315
Carlos	$2,950	$267
Daria	$4,000	$424

Which friend is demonstrating financial responsibility by staying within the goal of not having a car payment that exceeds 10% of their monthly income?

A. Allie
B. Benicio
C. Carlos
D. Daria

20. Which is not a true statement about the disadvantages of certain methods of payment?

A. You may be charged interest if you do not pay off your debit card balance each month.

B. You will not be able to make purchases online if you are paying with cash.

C. You may be charged an overdraft fee if you try to spend more on your debit card than is in your linked account.

D. You may be at risk for hacking if you use online banking.

ANSWERS

PART II: Apply your knowledge of financial responsibility to answer each question.

1. Blaine's take home pay is $2,500 each month, and he has created a budget to become more aware of where his money goes.

CATEGORY	AMOUNT
Rent + electricity/bills	$990
Food/groceries	$525
Gas + insurance	$320
Spending money	$235
Cell phone + internet	$250
Gym membership	$180

a. What advice would you give Blaine concerning his budget? Blaine may want to reduce some expenses so he can create a savings category.

b. Blaine can join a cheaper gym for $40/month, reduce his spending money to $200, and can find a phone and internet package for $175. How much will these choices save him each month, and what will that amount to after a year?

$250/month; $3,000/year

2. Paul wants to buy a $8,000 truck for his business. He has $6,200 in savings and can finance the rest at 4.7% interest. What advice would you give Paul, and what factors should he consider as he tries to make a financially wise decision?

Paul should consider if the truck will help his business generate more income. If so, I would advise Paul to use his savings and finance the rest and pay off the financed portion quickly.

3. Valerie works at a bank and advises homeowners to make sure their mortgage payment doesn't exceed 30% of their monthly take home pay. Find the maximum mortgage payment someone with the following take home amounts can afford by Valerie's guidelines. Then, explain how these guidelines can encourage financial responsibility.

These guidelines encourage homeowners to choose a mortgage that is within their means.

TAKE HOME PAY	MAXIMUM MONTHLY MORTGAGE
$2,000	$600
$3,000	$900
$4,000	$1,200
$5,000	$1,500

4. Adrian wants to build his savings by saving 10% of the paychecks he receives each week. For each paycheck, list what amount Adrian should save to meet his goal. Is Adrian's behavior financially responsible? Explain.

Adrian is being financially responsible by paying himself first and creating a habit of saving part of all of his earnings.

PAYCHECK	AMOUNT SAVED
$187.50	$18.75
$141.72	$14.17
$155.33	$15.53
$170.60	$17.06

5. Christian's bank account has a balance of $86.50. He is shopping with friends and has picked out a hat for $24.99 and a pair of shoes for $56.00. The sales tax rate is 8.75%.

a. What will the total amount of his purchase be, including sales tax? $88.07

b. Would using his debit card for the purchase be a financially wise decision? Explain, including any advice you would give to Christian.   No; Christian does not have enough in his account and may be charged an overdraft fee. If the hat and shoes are "wants" and not "needs", then I would tell him to only purchase one and wait to buy the other when he has enough saved.

6. Reynaldo has taken out two loans to purchase a car and a boat that he loves to use on the weekends with friends. Last month the boat had an expensive part that needed to be replaced and Reynaldo was late on his loan payment. This month, he had an emergency medical expenses and had to pay his car payment late. Is Reynaldo's behavior financially responsible, and how might it cost or benefit him in the future?
No; Reynaldo seems to be living above his means and doesn't have savings to help in the case of emergencies. If he continues to make late payments, he will have bad credit and may be charged more interest. He may also have trouble getting approved for loans in the future.

7. Candace uses a credit card for her rent and gas expenses. She pays the total balance off at the end of each month, and she earns 1% cash back on every dollar she spends. Candance usually uses the cash back to help pay for gifts for her kids on their birthdays. Is Candace's use of her credit card financially responsible? Explain.

Yes; Candace uses her card for expenses that she can pay off and is earning rewards by doing so.

8. Gus plans to attend college, but he will need to take out student loans. He wonders if taking out a loan for school is financially responsible. What advice would you give to Gus, and what should he consider when looking at loans?

Student loans can be necessary to get the job Gus wants in the future. I would tell him to look for low-interest student loans and research to make sure he understands the cost.

GreatHearts®

FINANCIAL RESPONSIBILITY

PART I: Read each situation below, and then circle the choice that you feel is the most financially responsible. In the last column, explain why you believe it is the financially responsible choice.

SITUATION	CHOICES	EXPLANATION
1. James is shopping for hiking boots for a trip he will take in 3-months. He has $150 saved and is saving $20/week. The boots he wants are normally $240, but are on sale this weekend for 20% off. Should James…	(a.) Use his savings to buy the shoes now and put the amount he is short on a credit card b. Wait until he has enough saved and buy the shoes later at full price with his savings	With the sale, the boots would be $192. James could use his savings and then pay off the credit card within about 2 weeks if he continues to save $20/week.
2. Skylar has a part-time job and makes about $350 each month. She needs to save to help pay for her first car in a few years. Should Skylar…	(a.) Set up a direct deposit for a set amount to go to her savings account on her paydays b. Wait until the end of each month, see how much she has left from her paycheck, and save that amount	Skylar is more likely to save if she does it first. If she waits until the end of the month, she may choose to spend most of the money she wanted to save.
3. Krista has $8,000 in savings and saves $250 each month. She wants to buy a used car for $10,200 because it has nicer features than her current car. Should Krista…	a. Use her $7,000 towards the car and finance the $5,200 at a 4% interest rate (b.) Continue to save $250 each month until her savings is enough to buy the car	It sounds like Krista wants the new car but it isn't a need. It seems more responsible then to wait until she can afford the car and not use credit.
4. The Johnson's want to move into a neighborhood where several of their friends live, but they would have to use the amount they currently save each month to pay for the mortgage. Should the Johnson's…	a. Buy the house to enjoy being close to friends and spend carefully until one spouse gets a raise at work (b.) Buy a home within their budget in a different area and continue to add to their savings each month	The Johnson's shouldn't live above their means, and they should choose to have a housing budget that still allows them to save money, especially when houses can have many repairs/expenses.

*Student answers and opinions may vary. A sample response has been given.

PART II: The table below lists the behavior of several individuals. Decide if you think the behavior or decision was financially responsible, and explain why.

SITUATION	FINANCIALLY RESPONSIBLE?
5. Bailey earned $210 last month. She used $150 to pay for concert tickets, $35 for dinner before the concert, and $25 to pay the minimum payment on her credit card balance of $300.	No; paying only the minimum payment on a credit card will mean that Bailey ends up paying more in interest and taking longer to pay off her debt. She should reduce her spending so that she can pay off her card.
6. Igor is in high school and got a part time job. With every paycheck, he has decided 10% will go to short term savings, 20% to long term savings, and the rest he will use for his current expenses and spending.	Yes; Igor is practicing a good habit by paying himself first and setting aside savings from his earnings.
7. Liliana downloaded the app that her bank offers. She created a username and password so when she's about to make a purchase she can use her phone to check her account balances.	Yes; by checking her account balance often, Liliana is more likely to stay within her budget and not overspend.
8. Nathaniel loves to help people, and he often lends money to friends in need. He knows that he can worry about bigger expenses later and shouldn't stress in the meantime.	No; while helping people is good, Nathaniel should balance his generosity by making sure that he is being responsible to save for future expenses.
9. Emma has $7,000 in savings and needs to purchase a $8,500 car. She is currently saving $150 each month. She uses her savings and finances the rest of the purchase. The loan she received is 0% interest for the first 12 months.	Yes; Emma found a loan that will not charge interest for the first year, and she can use $150 each month to pay off the balance of her car within about 10 months.
10. Jose needs to buy a laptop for $900 and he currently has $720 in savings. The laptop is on sale for 25% off this weekend, but Jose waits to purchase it because he still has 6 months until he needs the laptop.	No; Jose should buy the laptop now at the lower price. With 25% off, the laptop would be $675 and he has enough in savings to purchase it. If Jose waits, he will end up paying $125 more for the laptop.

PERSONAL FINANCIAL LITERACY STUDY GUIDE

Solve each of the problems below. Be sure to ask questions if you need more help with a topic.

I CAN CALCULATE SIMPLE AND COMPOUND INTEREST EARNINGS. 8.12D

1. An investment of $600 is made into an account that earns 6.5% annual simple interest for 15 years. Assuming no other deposits or withdrawals are made, find the following:

Interest Earned: **$585**

Value of Account: **$1,185**

2. An investment of $11,000 is made into an account that earns 4.25% annual compound interest for 30 months. Assuming no other deposits or withdrawals are made, find the following:

Interest Earned: **$1,206.27**

Value of Account: **$12,206.27**

3. Nadia deposited $3,000 into an account that earns annual simple interest. After 6 years, she had earned $990 in interest. What was the interest rate of the account?

5.5%

4. Darryl made a deposit into an account that earns 7% annual compound interest. After 36 months, the value of his account was $1,041.29. What was the approximate amount of Darryl's initial deposit?

$850

5. Rex deposited $900 into an account that earns 4% simple interest. How many years will it take for the value of the account to reach $1,800?

25 years

I CAN COMPARE SIMPLE AND COMPOUND INTEREST EARNINGS. 8.12D

6. Use what you know about simple and compound interest earnings to fill in each blank:

- Simple interest is calculated on the **principal** amount only.

- Compound interest is calculated on the **principal** amount plus any previous **interest** earned.

7. Adrienne and her brother John each inherit $7,000 that they use to open savings accounts with. Adrienne's account earns 4.7% annual compound interest and John's account earns 4.7% annual simple interest. Neither makes any additional deposits or withdrawals for 10 years.

a. Who's account will be worth more at the end of 10 years? **Adrienne**

b. How much more will the account be worth? **$790.64**

I CAN EXPLAIN HOW SMALL AMOUNTS OF MONEY GROW OVER TIME. 8.12C

8. Mel decides to start depositing $75 each month into an interest earning savings account. She does not make any additional deposits or withdrawals.

a. After 10 years, how much will Mel have contributed to the account? $9,000

b. According to her online calculations, the balance of Mel's account will be $12,352.41. Is this more or less than what she contributed, and why? More; after 10 years, Mel will have earned $3,352.41 in interest.

9. Is the graph below more likely to show the value of an account that earns simple interest or compound interest? Explain your choice.
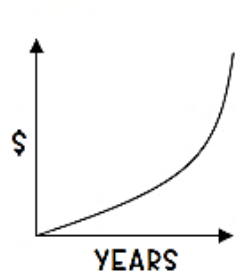
YEARS

Compound; with compound interest, the amount of growth increases each year as it continually adds previous interest earned. Simple interest growth would appear linear since it earns the same amount of interest each year.

10. Describe how the following factors affect your money's ability to "grow over time":

- Interest rate:
  The higher the interest rate, the more growth you will see.

- Time:
  The longer the investment, the more growth you will see.

I CAN CALCULATE THE TOTAL COST OF CREDIT. 8.12A, 8.12B

11. Jackie took out a $9,000 personal loan with a 4.5% interest rate that she will pay back in 3 years. She will make monthly payments of $267.72. Calculate the total cost of repayment and the total interest Jackie will pay.

Total repayment: $9,637.92

Interest: $637.92

12. Marvin is paying off a $6,800 loan that he took out for his new business. The loan has a 5.2% interest rate and Marvin will pay it off in 5 years by making monthly payments of $128.95. Find the total cost of repayment and the interest Marvin will pay on his loan.

Total repayment: $7,737

Interest: $937

13. Jessie is taking out a $32,000 loan for a new car at an interest rate of 4.2%. He is deciding between the following terms:

- 3-Year Term → Monthly Payments: $948
- 5-Year Term → Monthly Payments: $592

Which term will result in the lowest total repayment? 3-year term

How much less interest would Jessie pay? $1,392

14. Hilda is taking out an $11,000 personal loan that she will repay in 5 years. If she receives a 10% interest rate, her monthly payments will be $233.72. If she receives an 18% interest rate, her monthly payments will be $279.33.

How much less interest will Hilda pay in interest if she qualifies for the lower interest rate? $2,736.60

I CAN ESTIMATE THE COST OF COLLEGE AND DEVISE A SAVINGS PLAN.   8.12G

15. Darnell researched the public university he wants to attend to estimate the cost of attending.

a. What should Darnell estimate the total cost of one year to be? **$18,700**

TUITION & FEES	$8,000
ROOM & BOARD	$9,100
BOOKS & SUPPLIES	$950
TRANSPORTATION, ETC	$650

b. Darnell's family can contribute 60% of the total annual expenses (before financial aid), and Darnell estimates that he will qualify for $6,000 in scholarships and grants for his first year. How much does that leave for Darnell to cover for his first year of college? **$1,480**

c. If Darnell has 18 months to save, how much should he save each month? **$82.22**

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16. Leah predicts that she will need to contribute $7,000/year for her college tuition. She already has $4,000 in savings, and the table shows the total value she will have in her account at the end of 4 years depending on how much she deposits.

If Leah wants enough after 4 years to cover her contribution for the first two years of college, what is the minimum amount she should deposit each month? **$200/month**

STARTING VALUE	MONTHLY DEPOSIT	END VALUE (4 YEARS)
$4,000	$100	$9,602
$4,000	$150	$12,149
$4,000	$200	$14,696
$4,000	$250	$17,242

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17. There are many forms of financial aid to help pay for college. What is the main difference between student loans and grants or scholarships?

Student loans have to be repaid, while the other forms of aid do not.

I CAN EXPLAIN THE ADVANTAGES AND DISADVANTAGES OF DIFFERENT PAYMENT METHODS.   8.12E

Each of the following describes an advantage of using a certain method of payment. Fill in the blank to identify which method of payment it describes (cash, credit card, debit card or online banking).

Online Banking 18. Allows you to transfer money, make deposits or pay bills from home.

Credit Card 19. Allows you to prove you are trustworthy and capable of repaying loans.

Cash 20. Allows you to "feel" your spending and possibly stay within your budget better.

Debit Card 21. Allows you to purchase things conveniently and requires a special security code.

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22. Your younger brother has heard that credit cards are bad and you shouldn't use them. How would you respond? What advantages to credit cards could you inform your brother about?
It is good to build good credit by using a credit card responsibly. You can also earn rewards through credit cards and they can be helpful in case of emergencies.

I CAN EXPLAIN THE ADVANTAGES AND DISADVANTAGES OF DIFFERENT PAYMENT METHODS.   8.12E

Each of the following describes a disadvantage of using a certain method of payment. Fill in the blank to identify which payment of payment it describes (cash, credit card, debit card or online banking).

_____Cash_____ 23. Your way of tracking spending is by keeping your receipts.

__Online Banking__ 24. Susceptible to hacking and identify theft.

____Credit Card____ 25. You will be charged interest if your balance isn't paid off in full at the end of the month.

____Debit Card____ 26. You may be charged overdraft fees if you try to spend more than is currently in your account.

I CAN IDENTIFY FINANCIALLY RESPONSIBLE AND IRRESPONSIBLE DECISIONS.   8.12F

27. Henley's take home pay is $3,300 each month. Henley wants to make a budget for herself and has decided what percent of her income should go towards each part of her budget. Complete the budget by writing the actual dollar amounts in the blank row of the table:

HOUSING	TRANSPORTATION	FOOD	PHONE/INTERNET	SPENDING	GIFTS	SAVINGS
30%	15%	15%	7%	15%	8%	10%
$990	$495	$495	$231	$495	$264	$330

28. Henley has thought about buying a new car, but her car payment would require 10% of her budget. Henley would use the 10% she is putting in savings for her car payment. Would you advise Henley to buy the new car? If not, explain other options Henley could consider.

No; if Henley does need to buy the car, I would advise her to look at reducing some of her other expenses like spending so that she could afford the car payment and still continue to save.

29. Henley wants to buy a laptop for $1,100. She currently has $110 in savings. Assuming she continues to save 10% of her take home pay each month, how many months will it take for Henley to have enough for the laptop?

3 months

30. Henley uses her credit card for her spending category. Last month she used it for the purchases shown in the table.

a. How much over/under did Henley spend for the month?

$46.38 over

b. Describe if her behavior is financially responsible, and explain some potential costs or benefits of her behavior.

No; if Henley continues to spend over her budget, she may not meet her savings goals. She could also start to have a hard time paying off any debts/bills.

DESCRIPTION	COST
Clothing	$175.80
Cell phone cover	$38.25
Make-up	$65.33
Coffee table	$215
Movies and music	$47