

Answers

Page 7: Penny Rounding

If a company uses this penny rounding method, and 300 people come in to shop and all of their purchases are rounded up by 0.02, how much extra money did that company make for no reason?

$$300 \times 0.02 = \$6.00 \text{ made}$$

$$300 \times 0.02 = \$6.00 \text{ lost}$$

What are your thoughts on penny rounding? Do companies end up breaking even? Or is it favored one way? Answers will vary

Page 9: Counting Money

Piggy Bank:

75 pennies: \$0.75

15 nickels: \$0.75

8 dimes: \$0.80

22 quarters: \$5.50 (22 x .25)

3 one dollar bills: \$3.00

2 five dollar bills: \$10.00

3 ten dollar bills: \$30.00

1 twenty dollar bill: \$20.00

Total Amount: \$70.80

National Park:

1 five dollar bill = \$5.00

4 one dollar bills = \$4.00

10 quarters = \$2.50

8 dimes = \$0.80

3 nickels = \$0.15

5 pennies = \$0.05

Do you have enough money to buy what you want? Yes

How much money do you have? \$12.50

What bills and coins did you use to pay? Answers will vary

Page 10: Adding Money

Pennies: \$2.00

Nickels: \$3.25

Dimes: \$50.00

Quarters: \$80.00

Dollar Coins: \$10.00

Total: \$40.25

Page 11: Subtracting Money

William Spent: $\$80.00 - \$12.82 = \$67.18$

Jason Spent: $\$125.00 - \$4.13 = \$120.87$

Page 12: Counting Change

Shelby: $\$10.00 - \$6.27 = \$3.73$ in change (3 pennies, 2 dimes, 2 quarters, 2 \$1s)

Nicole: $\$5.00 - \$3.63 = \$1.37$ om change (2 pennies, 1 dime, 1 quarter, and \$1)

Page 13: Quiz

1 = \$12.00

2 = \$4.55

3 = \$9

4 = \$8.80

5 = \$30.45

6 = \$11.45

10 = 1 nickel, 1 dime, 2 quarters, 3 ones

11 = 1 penny, 1 nickel, 3 quarters, 2 ones

Page 15: Needs

All answers will vary

Page 16: Working Out Our Needs

Food = Things we eat for energy and growth

Shelter = A safe place to live and sleep

Clothing = Things we wear to protect our bodies

Water = Liquid we drink to stay alive

Hygiene = Keeping clean to stay healthy
Money = Bills, and coins used to buy items

We need to drink clean **water** every day so we do not get thirsty.

A house is a type of **shelter** that keeps us warm and dry.

We use **money** at the store to pay for the things we need.

Washing our hands is a good **hygiene** habit that stops germs.

Wearing a heavy coat is **clothing** that protects us from the snow.

Eating healthy **food** gives our bodies the power to run and play.

Needs: apple, water, bed, toothbrush, rainboots

Page 17: Wants

Wants: Video game, bicycle, candy

Rest of answers will vary

Page 18: Working On Our Wants

Wants: Video game console, designer sneakers, smart phone, toy race car,
ice cream, dog

Keep: comic book, cat, stuffed animals

Experiences: Amusement park, movie ticket, skateboard park

Rest of answers will vary

Page 19: Contentment:

Answers will vary

Page 20: Hearts Content

Were Dave's bite sized cookies bad? No

Answers will vary

Becca: Answers will vary

Page 21: Subscriptions

Imagine that you sign up for a “10-Day Free Trial” of a hiking app that directs you to nature trails. What will happen on Day 11? **You will be charged**

What is a “hidden cost” of having too many subscriptions to keep up with? **You can forget you have one, and still be charged even though you don’t lose it**

True or False: If you have a subscription for an app on a device and you delete the app, the subscription automatically cancels and stops charging you. **False**

How often do subscription fees come out of your bank account? **Monthly or yearly, depends on how it is set up.**

Page 22: Subscriptions

Answers will vary
Candy Subscription
Movie once a month
Grocery Subscription

Page 23: Quiz

1 = B
2 = C
3 = B
4 = C
5 = A

Page 24: Spending

\$22.50 with impulse spending
\$18.50 without impulse spending
Rest of answers will vary

Page 25: Smart Spending

Leah - Answers will vary
Rent = Fixed
Tickets to baseball game = variable
Birthday gift = variable
Car payment = Fixed

Peter = \$11.25
Matt = \$15.00, gets \$5.00 back
Lynn = \$15.00

Page 26: Price vs. Value

Lucas: Laptop B, answers about why will vary
Julia: \$30.00 blender

Page 27: Spending Traps

$\$45.00 + \$7.00 = \$52.00$
Spending trap: Spending money to save money

Page 29: Changing Habits

Answers will vary

Page 30: Changing Habits

Jeff: \$34.85 on coffee per week ($\$6.97 \times 5$)
\$72.15 on lunches ($\14.43×5)
Saved \$150 in two weeks from allowance ($\$75 + \75)
He saved \$214 in two weeks by not getting coffee and going to lunch
($\$34.85 + \$34.85 + \$72.15 + \72.15)
He has saved money

Evie: Spent \$135.99
Has \$14.01 left in her account
She is not able to buy her kitchen appliance

Page 31: Quiz

- 1 = B
- 2 = C
- 3 = B
- 4 = C
- 5 = A

Page 32: Sales Tax

Receipt 1:

$$\$8.25 + \$7.43 = \$15.68$$

$$\$15.68 \times 0.0525 = 0.8232 = \$0.82$$

$$\$15.68 + 0.82 = \$16.50$$

Receipt 2:

$$\$50.73 + \$10.46 + \$20.43 + \$17.76 = \$99.38$$

$$\$99.38 \times 0.095 = \$9.44$$

$$\$99.38 + \$9.44 = \$108.82$$

Receipt 3:

$$\$25.80 + \$3.50 + \$5.38 + \$12.49 + \$2.14 = \$49.31$$

$$\$49.31 \times 0.075 = \$3.69825 \rightarrow \$3.70$$

$$\$49.31 + \$3.70 = \$53.01$$

Page 33: Sales Tax

Gene

What is the total of the two items? $\$75 + \$35 = \$110$

What is the sales tax on both items? $\$110 \times 0.055 = \6.05

What is Gene's final receipt subtotal? $\$110 + \$6.05 = \$116.05$

Charlene

What is the total cost of the book including tax? $\$19 \times 0.065 = \1.23

Does Charlene have enough money to buy the book? $\$19 + \$1.23 = \$20.23$

She does not have enough money

Chris

How much is the sales tax going to be? $\$350 \times 0.095 = \33.25

What is the total cost of the laptop? $\$350 + \$33.25 = \$383.25$

Addy

How much is each sales tax? $\$475.58 \times 0.025 = \$11.8895 \rightarrow \$11.89$

and $\$475.58 \times 0.06 = \28.53

How much will the phone be after the sales tax is added? $\$11.89 + \$28.53 = \$40.42$

$$\$475.58 + \$40.42 = \$516.00$$

Page 34: Tipping

TIP: Restaurant Server, Uber/Lyft Driver, Hairstylist/Barber

DON'T TIP: Drive thru cashier, Grocery store clerk, Plumber

Page 35: Tipping

Answers will vary

Page 36: Quiz

$$1 = \$60 \times 0.08 = \$4.80, \$60 + \$4.80 = \$64.80$$

$$2 = \$45 \times 0.20 = \$9, \$45 + \$9 = \$54$$

$$3 = \$30 \times 0.10 = \$3, \$30 \times 0.15 = \$4.50, \$30 + \$3 + \$4.50 = \$37.50$$

$$4 = \$80 \times 0.05 = \$4, \$80 + \$4 = \$84, \$84 \times 0.20 = \$16.80, \$84 + \$16.80 = \$100.80$$

$$5 = \$28.50 \times 0.15 = \$4.275 \rightarrow \$4.28, \$4.28 + \$28.50 = \$32.78$$

$$6 = \$50 \times 0.06 = \$3, \$50 \times 0.18 = \$9, \$50 + \$3 + \$9 = \$62$$

Page 38: Budgeting

Groceries: \$504, Savings: \$336, Bills: \$700, Vacation: \$140, Charity: \$280, Spending: \$140, Vehicles: \$560, Subscriptions: \$140

Groceries: \$1,216, Savings: \$960, Bills: \$1,600, Vacation: \$448, Charity: \$640, Spending: \$448, Vehicles: \$1,088

Adding in the bonus:

$$\text{Savings: } \$960 + \$500 = \$1,460$$

$$\text{Vacation: } \$448 + \$500 = \$948$$

Page 39: Budgeting

Answers will Vary

Allowance: \$32.50 needs, \$19.50 wants, \$13.00 savings

Household: \$2,250 needs, \$1,350 wants, \$900 savings/debt

Inn:

$$\text{Monthly: } \$85,000 \div 12 = \$7,083.33$$

$$\text{Weekly: } \$1,634.62$$

$$\text{Needs: } \$3,541.67$$

$$\text{Wants: } \$2,125.00$$

$$\text{Savings/Debt: } \$1,416.66$$

Page 40: Budgeting

Answers will vary

Page 41: Setting Financial Goals

1 = Short Term Goal

2 = $\$200 + \$300 = \$500$, $\$3,000 - \$5,000 = \$2,500$ left to save

Page 42: Setting Financial Goals

$$3a = \$50 \times \$52 = \$2,600$$

3b = Yes it is enough to reach her goal

$$4a = 20 \times \$12.75 = \$255.00$$

$$4b = \$50 + \$20 = \$70$$

$$4c = \$255 - \$70 = \$185$$

$$4d = \left(\frac{\$70}{\$255} \right) \times 100 = 0.2745098 = 27.45\%$$

5 = She doesn't need to change any habit

6 = Yes she could

$$7 = \$20.00 \times 52 = \$1,040$$

8 = Answers will vary

Page 43: Donation

Answers will vary

Page 44: Giving From the Heart

Animal Shelter:

$$\$1,500 - \$550 = \$9,520$$

$$\$950 \div 30 = 31.6 \text{ ---> About 32 people}$$

Museum:

$$15 \times \$40 = \$600$$

$$30 \times \$80 = \$2,400$$

$$50 \times \$150 = \$7,500$$

$$\$600 + \$2,400 + \$7,500 = \$10,500$$

Charity:

$$\$2,800 \times \$2.00 = \$5,600$$

$$\$2,800 + \$5,600 = \$8,400$$

School:

$$60 \times \$2 = \$120$$

$$40 \times \$1.50 = \$60$$

$$25 \times \$1.75 = \$43.75$$

$$10 \times \$1.00 = \$10$$

$$\$120 + \$60 + \$43.75 + \$10 = \$233.75$$

$$\$233.75 - \$100 = \$133.75$$

Page 45: Quiz

$$1 = \$4,000 \times 0.30 = \$1,200$$

2 = Scale back on wants

3 = Divide the amount you want to save by the amount of time you have. The money comes from the budget.

$$4 = B$$

$$5 = C$$

$$6 =$$

Needs: \$3,087.50

Wants: \$1,852.50

Savings/Debt: \$1,235

Page 50: Income

Justin:

Spends: \$63,600 yearly

Spends \$5,300 monthly

Earns monthly \$9,666.67 ($\$63,600 \div 12$)

Lives below his means

Teresa:

Spends \$63,228.00 yearly

Spends \$5,269.00 monthly

\$4,583.33 monthly income ($\$55,000 \div 12$)

No extra money

Lives above her means

Page 51: Living Wage

Add up all expenses, divide by the number of hours worked:

$$\$950 + \$180 + \$100 + \$325 + \$700 + \$300 + \$535 = \$3,090$$

$$\$3,090 \div 160 = \$19.31 \text{ is the living wage}$$

Page 52: Two Types of Income

$$\$25 \times 6 = \$150$$

He would need to wash 180 cars to save \$4,500

$$\$4,500 \div \$25 = 180$$

Answers will vary

Page 53: Salary

	Dental Hygienist	HVAC Tech	Diesel Tech
Monthly Salary	\$7,916.67	\$5,000	\$5,166.67
Needs	\$3,958.34	\$2,500	\$2,583.34
Wants	\$2,375	\$1,500	\$1,550.00
Debt and Savings	\$1,583.33	\$1,000	\$1,033.33

Page 56: Side Hustles and Side Gigs

Answers will Vary

Page 57: Net Worth

Assets: \$40,000

Liabilities: \$266,500

Assets - Liabilities = Net Worth

$$\$40,000 - \$266,500 = -\$226,500$$

Page 59: Income Tax

Alaina:

$$1 = \$2,240$$

$$2 = \$448$$

$$3 = \$2,240 - \$448 = \$1,792$$

Laurel:

$$1 = \$4,200$$

$$2 = \$120$$

$$3 = \$4,200 - \$120 = \$4,080$$

$$4 = \$40,000 \times 0.15 = \$6,125$$

$$5 = \$4,080 - \$6,125 = \$3,468$$

Ayla:

$$1 = \$2,177.72$$

$$2 = \$75 + \$2.72 = \$77.72$$

$$3 = \$2,177.72 - \$77.72 = \$2,100$$

$$4 = \$2,100 \times 0.18 = \$378$$

$$5 = \$2,100 - \$378 = \$1,722$$

Page 61: Quiz

$$1 = \$450 + \$210 + \$344.25 + \$120 = \$1,124.25$$

$$\$4,500 - \$1,124.25 = \$3,375.75$$

$$2 = (\$22.50 - \$15) \times 40 = \$300$$

$$3 = \$2,150 \times 26 = \$55,900$$

$$4 = \$150 - (40 \times 0.65) = \$150 - \$26 = \$124$$

$$5 = \$350 \div \$5,000 = 0.07$$

$$0.07 \times 100 = 7\%$$

Page 62: Loans

Debt backed by collateral (like a house or car) that the lender can claim if the borrower defaults. **Secured Loan**

Debt that does not require collateral; lenders rely solely on the borrower's creditworthiness. **Unsecured Loan**

Specific installment loans used exclusively to buy real estate, where the property itself serves as collateral. **Mortgage**

A flexible, revolving line of credit that lets a homeowner borrow money against the market value of their house. **Heloc**

If you need money for general expenses like debt consolidation or medical bills, a flexible **Personal Loan** is often a good option.

To buy a vehicle, a buyer will typically sign up for a fixed-term **Auto Loan** where the vehicle is used as collateral.

Financial aid used to fund higher education at colleges or trade schools is known collectively as **Student Loan**.

A specific type of federal financial aid borrowed directly by parents to pay for their undergraduate child's education is called **Parent Plus Loan**.

Entrepreneurs looking to fund a startup, purchase inventory, or buy commercial equipment apply for **Business Loan**

$$1 = 12 \times 10 = 120 \text{ months}$$

$$2 = \$13,036.99 + \$675 = \$13,711.99$$

$$3 = \$38,184 - \$8,184 = \$30,000$$

Page 64: Repossession

$$A = \$3,036.99 + \$675 = \$13,711.99$$

$$B = \$38,184 - \$8,184 = \$30,000$$

Page 67: Payday Loans

Answers will vary

Page 68: Quiz

$$1 = B$$

$$2 = \text{Fico}$$

$$3 = \$115$$

$$4 = B$$

$$5 = B$$

$$6 = \text{Answers will vary}$$

Page 69: Expenses

$$\text{Total Bills: } \$444.81$$

Other Answers will vary

Page 70 and 71: Expenses

Answers will vary

Page 72: Emergency Funds

Allison:

$$\text{Total Cost: } \$248.95 + \$87.73 + \$67.43 = \$404.11$$

Yes She has enough

Answers will vary

She would have \$95.89 left in her emergency fund ($\$500 - \404.11)

Kolby:

Answers will vary

Page 73: Emergency Funds

Chris and Charlene answers will vary

$$\text{Kolby: } \$90,000 \times 0.20 = \$18,000$$

$$\text{Chris: } \$500 \times 0.20 = \$100$$

$$\text{Charlene: } \$70,000 \times 0.20 = \$14,000$$

Page 74: Quiz

$$1 = B$$

$$2 = B$$

$$3 = \text{False}$$

$$4 = \text{False}$$

$$5 = \$800 + \$300 + \$150 + \$100 = \$4,050$$

$$6 = \$3,000 \times 0.15 = \$450$$

Page 75: Debt

Eric owes: \$88 dollars ($\$25 + \$50 + \$10 + \3)

No he did not

Answers will vary

Page 76: Debt

Cole's:

$$\$4,125 \text{ spent } (\$2,000 + \$900 + \$275 + \$750 + \$200)$$

$$\$2,925 \text{ made } (\$800 + \$600 + \$550 + \$975)$$

No profit was made, they are in the red

Randy's:
 \$2,400 spent (\$1,000 + \$300 + \$600 + \$300 + \$200)
 \$3,175 made (\$950 + \$775 + \$800 + \$650)
 Yes they made a profit
 They are in the black

Page 77: Debt Snowball

Credit Card 1 - \$200.00
 Credit Card 2 - \$500.00
 Medical - \$650.00
 Car Loan - \$4,500.00

Page 78: Debt Snowball

Credit Card 1 Month 3: \$200, 25% interest, \$50 payment

Month 3	$\$56.86 \times \left(\frac{.25}{12}\right) = \1.18	\$75	$\$56.86 + \$1.18 = \$58.04$ $\$75 - \$58.04 = \$16.96$ Extra
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Credit Card 2: \$500, 22% interest, \$95 payment

Month	Interest	Payment	Ending
1	$\$500 \times \left(\frac{.22}{12}\right) = 9.166$ Round to \$9.17	\$95	$\$500 + \$9.17 = \$509.17$ $\$509.17 - \$95 = \$414.17$
2	$\$414.17 \times \left(\frac{.22}{12}\right) = \7.59	\$95	$\$41.17 + \$7.59 = \$421.76$ $\$421.76 - \$95 = \$326.76$
3	$\$326.76 \times \left(\frac{.22}{12}\right) = \5.99	$\$95 + \$16.96 = \$111.96$	$\$326.76 + \$5.99 = \$332.75$ $\$332.75 - \$111.96 = \$220.79$
4	$\$220.79 \times \left(\frac{.22}{12}\right) = \4.047 Round to \$4.05	$\$95 + \$25 + \$50 = \170	$\$220.79 + \$4.05 = \$224.84$ $\$224.84 - \$170 = \$54.84$
5	$\$54.84 \times \left(\frac{.22}{12}\right) = \1.0054 Round to \$1.01	\$170	$\$54.84 + \$1.01 = \$55.85$ $\$170 - \$55.85 = \$114.15$ extra

Medical Bill: \$650, 18% interest, \$75 payment

Month	Interest	Payment	Ending
1	$\$650 \times \left(\frac{0.18}{12}\right) = \9.75	\$75	$\$650 + \$9.75 = \$659.75$ $\$659.75 - \$75 = \$584.75$
2	$\$584.75 \times \left(\frac{0.18}{12}\right) = \8.77	\$75	$\$584.75 + \$8.77 = \$593.52$ $\$593.52 - \$75 = \$518.52$
3	$\$518.52 \times \left(\frac{0.18}{12}\right) = \7.7778 Round up to \$7.78	\$75	$\$518.52 + \$7.78 = \$526.30$ $\$526.30 - \$75 = \$383.07$
4	$\$451.30 \times \left(\frac{0.18}{12}\right) = \6.7695 Round up to \$6.77	\$75	$\$451.30 + \$6.77 = \$458.07$ $\$458.07 - \$75 = \$383.07$
5	$\$383.07 \times \left(\frac{0.18}{12}\right) = \5.746 Round up to \$5.75	$\$75 + \$114.15 = \$189.15$	$\$383.07 + \$5.75 = \$388.82$ $\$388.82 - \$189.15 = \$199.67$
6	$\$199.67 \times \left(\frac{0.18}{12}\right) = \2.995 Round up to \$3.00	$\$75 + \$170 = \$245$	$\$199.67 + \$3.00 = \$202.67$ $\$202.67 - \$245 = \$42.33 \text{ extra}$

Car Loan: \$4,500, 28% interest, \$275

Month	Interest	Payment	Ending
1	$\$4,500 \times \left(\frac{.28}{12}\right) = \105	\$275	$\$4,500 + \$105 = \$4,605$ $\$4,605 - \$275 = \$4,330$
2	$\$4,330 \times \left(\frac{.28}{12}\right) = \101.03	\$275	$\$4,330 + \$101.03 = \$4,431.03$ $\$4,431.03 - \$275 = \$4,156.03$
3	$\$4,156.03 \times \left(\frac{.28}{12}\right) = \96.97	\$275	$\$4,156.03 + \$96.97 = \$4,253$ $\$4,253 - \$275 = \$3,978.03$

Month	Interest	Payment	Ending
4	$\$3,978 \times \left(\frac{.28}{12}\right) = \92.82	\$275	$\$3,978 + \$92.82 = \$4,070.82$ $\$4,070.82 - \$275 = \$3,795.82$
5	$\$3,795.82 \times \left(\frac{.28}{12}\right) = \88.569 Round up \$88.57	\$275	$\$3,795.82 + \$88.57 = \$3,884.39$ $\$3,884.39 - \$275 = \$3,609.39$
6	$\$3,609.82 \times \left(\frac{.28}{12}\right) = \84.219 Round up \$84.22	$\$275 + \$42.33 =$ \$317.33	$\$3,609.39 + \$84.22 = \$3,153.61$ $\$3,153.61 - \$317.33 = \$2,836.28$
7	$\$2,836.28 \times \left(\frac{.28}{12}\right) = \66.179 Round up \$66.18	$\$25 + \$50 + \$95$ $+ \$75 = \520	$\$2,836.28 + \$66.18 = \$2,902.46$ $\$2,902.46 - \$520 = \$2,382.46$
8	$\$2,382.46 \times \left(\frac{.28}{12}\right) = \55.59	\$520	$\$2,382.46 + \$55.59 = \$2,438.05$ $\$2,438.05 - \$520 = \$1,918.05$
9	$\$1,918.05 \times \left(\frac{.28}{12}\right) = \44.75	\$520	$\$1,918.05 + \$44.75 = \$1,962.80$ $\$1,962.80 - \$520 = \$1,442.80$
10	$\$1,442.80 \times \left(\frac{.28}{12}\right) = \33.665 Round up \$33.67	\$520	$\$1,442.80 + \$33.67 = \$1,476.47$ $\$1,476.47 - \$520 = \$956.47$
11	$\$956.47 \times \left(\frac{.28}{12}\right) = \22.3176 Round up \$22.32	\$520	$\$956.74 + \$22.32 = \$978.79$ $\$978.79 - \$520 = \$458.79$
12	$\$458.79 \times \left(\frac{.28}{12}\right) = \10.705 Round up \$10.71	\$520	$\$458.79 + \$10.71 = \$469.50$ $\$520 - \$469.50 = \$50.50$ extra

Page 79: Debt Avalanche

Credit Card 1: \$800, 24% interest, \$105 payment

Month	Interest	Payment	Ending
1	$\$800 \times \left(\frac{.24}{12}\right) = \16	$\$105 + \$40 =$ \$145	$\$800 + \$16 = \$816$ $\$816 - \$145 = \$671$

2	$\$671 \times \left(\frac{.24}{12}\right) = \13.42	\$145	$\$671 + \$13.42 = \$684.42$ $\$684.42 - \$145 = \$539.42$
3	$\$539.42 \times \left(\frac{.24}{12}\right) = \10.79	\$145	$\$539.42 + \$10.79 = \$550.21$ $\$550.21 - \$145 = \$405.21$
4	$\$405.21 \times \left(\frac{.24}{12}\right) = \8.10	\$145	$\$405.21 + \$8.10 = \$413.31$ $\$413.31 - \$145 = \$268.31$
5	$\$268.31 \times \left(\frac{.24}{12}\right) = \5.366 Round up \$5.37	\$145	$\$268.31 + \$5.37 = \$273.68$ $\$273.68 - \$145 = \$128.68$
6	$\$128.68 \times \left(\frac{.24}{12}\right) = \2.57	\$145	$\$128.68 + \$2.57 = \$131.25$ $\$145 - \$131.25 = \$13.75 \text{ extra}$

Remainder of last payment: \$13.75

Page 80: Debt Avalanche

Car Loan: \$7,500, 18% interest, \$250

Month	Interest	Payment	Ending
1	$\$7,500 \times \left(\frac{.18}{12}\right) = \112.50	\$250	$\$7,500 + \$112.50 = \$7,612.50$ $\$7,612.50 - \$250 = \$7,362.50$
2	$\$7,362.50 \times \left(\frac{.18}{12}\right) = \110.43	\$250	$\$7,362.50 + \$110.43 = \$7,472.93$ $\$7,472.93 - \$250 = \$7,222.93$
3	$\$7,222.93 \times \left(\frac{.18}{12}\right) = \108.34	\$250	$\$7,222.93 + \$108.34 = \$7,328.27$ $\$7,328.27 - \$250 = \$7,078.27$
4	$\$7,078.27 \times \left(\frac{.18}{12}\right) = \106.17	\$250	$\$7,078.27 + \$106.17 = \$7,184.44$ $\$7,184.44 - \$250 = \$6,934.44$
5	$\$6,934.44 \times \left(\frac{.18}{12}\right) = \104.0166 Round up \$104.02	\$250	$\$6,934.44 + \$104.02 = \$7,038.46$ $\$7,038.46 - \$250 = \$6,788.46$

6	$\$6,788.46 \times \left(\frac{.18}{12}\right) = \101.82	$\$250 + \$13.75 = \$263.75$	$\$6,788.46 + \$101.82 = \$6,890.28$ $\$6,890.28 - \$263.75 = \$6,626.53$
7	$\$6,626.53 \times \left(\frac{.18}{12}\right) = \99.397 Round up \$99.40	$\$250 + \$175 = \$425$	$\$6,626.53 + \$99.40 = \$6,725.93$ $\$6,725.93 - \$425 = \$6,300.93$
8	$\$6,300.93 \times \left(\frac{.18}{12}\right) = \94.51	\$425	$\$6,300.90 + \$94.51 = \$6,395.44$ $\$6,395.44 - \$425 = \$5,970.44$
9	$\$5,970.44 \times \left(\frac{.18}{12}\right) = \89.55	\$425	$\$5,970.44 + \$89.55 = \$6,059.99$ $\$6,059.99 - \$425 = \$5,634.99$
10	$\$5,634.99 \times \left(\frac{.18}{12}\right) = \84.52	\$425	$\$5,634.99 + \$84.52 = \$5,719.51$ $\$5,719.51 - \$425 = \$5,294.51$
11	$\$5,634.99 \times \left(\frac{.18}{12}\right) = \84.52	\$425	$\$5,294.51 + \$79.41 = \$5,373.92$ $\$5,373.92 - \$425 = \$4,948.92$
12	$\$4,948.92 \times \left(\frac{.18}{12}\right) = \74.23	\$425	$\$4,948.92 + \$74.23 = \$5,023.15$ $\$5,023.15 - \$425 = \$4,598.15$
13	$\$4,598.15 \times \left(\frac{.18}{12}\right) = \68.97	\$425	$\$4,598.15 + \$68.97 = \$4,667.12$ $\$4,667.12 - \$425 = \$4,242.12$
14	$\$4,242.12 \times \left(\frac{.18}{12}\right) = \63.63	\$425	$\$4,242.12 + \$63.63 = \$4,305.75$ $\$4,305.75 - \$425 = \$3,880.75$
15	$\$3,880.75 \times \left(\frac{.18}{12}\right) = \58.21	\$425	$\$3,880.75 + \$58.21 = \$3,938.96$ $\$3,938.96 - \$425 = \$3,513.96$
16	$\$3,513.96 \times \left(\frac{.18}{12}\right) = \52.70	\$425	$\$3,513.96 + \$52.70 = \$3,566.66$ $\$3,566.66 - \$425 = \$3,141.66$
17	$\$3,141.66 \times \left(\frac{.18}{12}\right) = \47.12	\$425	$\$3,141.66 + \$47.12 = \$3,188.78$ $\$3,188.78 - \$425 = \$2,763.78$
18	$\$2,763.78 \times \left(\frac{.18}{12}\right) = \41.456 Round up \$41.46	\$425	$\$2,763.78 + \$41.46 = \$2,805.24$ $\$2,805.24 - \$425 = \$2,380.24$

19	$\$2,380.24 \times \left(\frac{.18}{12}\right) = \35.70	$\$425 + \$110 = \$535$	$\$2,380.24 + \$35.70 = \$2,415.94$ $\$2,415.94 - \$535 = \$1,880.94$
20	$\$1,880.94 \times \left(\frac{.18}{12}\right) = \28.21	$\$425 + \$190 = \$615$	$\$1,880.94 + \$28.21 = \$1,909.15$ $\$1,909.15 - \$615 = \$1,294.15$
21	$\$1,294.15 \times \left(\frac{.18}{12}\right) = \19.41	$\$615$	$\$1,294.15 + \$19.41 = \$1,313.56$ $\$1,313.56 - \$615 = \$698.56$
22	$\$698.56 \times \left(\frac{.18}{12}\right) = \10.478 Round up \$10.48	$\$615$	$\$698.56 + \$10.48 = \$709.04$ $\$709.04 - \$615 = \$94.04$
23	$\$94.04 \times \left(\frac{.18}{12}\right) = \1.41	$\$615$	$\$94.04 + \$1.41 = \$95.45$ $\$615 - \$95.45 = \$519.55 \text{ extra}$

It would take 24 months to pay off.

BUT there was a trick. If you notice in month 19 an extra \$110 was added, and in month 20 \$190 was added. This is because the braces were paid off in 19 months, and that money was then rolled into the car loan.

Since there is no interest charged on the braces. It is very simple to figure out. You just need to subtract the \$190 payment from the total amount due (\$3,500)

Braces: \$3,500 due, no interest, \$190 monthly payment

Month	Payment	Ending Balance
1	\$190	$\$3,500 - \$190 = \$3,310$
2	\$190	$\$3,310 - \$190 = \$3,120$
3	\$190	$\$3,120 - \$190 = \$2,930$
4	\$190	$\$2,930 - \$190 = \$2,740$

Month	Payment	Ending Balance
5	\$190	$\$2,740 - \$190 = \$2,550$
6	\$190	$\$2,550 - \$190 = \$2,360$
7	\$190	$\$2,360 - \$190 = \$2,170$
8	\$190	$\$2,170 - \$190 = \$1,980$
9	\$190	$\$1,980 - \$190 = \$1,790$
10	\$190	$\$1,790 - \$190 = \$1,600$
11	\$190	$\$1,600 - \$190 = \$1,410$
12	\$190	$\$1,410 - \$190 = \$1,220$
13	\$190	$\$1,220 - \$190 = \$1,030$
14	\$190	$\$1,030 - \$190 = \$840$
15	\$190	$\$840 - \$190 = \$650$
16	\$190	$\$650 - \$190 = \$460$
17	\$190	$\$460 - \$190 = \$270$
18	\$190	$\$270 - \$190 = \$80$
19	\$190	$\$190 - \$80 = \$110 \text{ extra}$

In month 19, the extra \$110 is added to the car payment

Page 81: Percentage Repayment Plan

Credit Utilization: $\frac{\$3,200}{\$4,000} = 0.8 = 80\%$

$0.8 \div 5 = 0.16 = 16\%$ Credit needs to drop 16% per month

$\$4,000 \times .16 = \640 \$640, this is the amount the balnce must drop by per month, before interest is added in

Credit card: \$4,000 dollar limit, \$3,200 balance, 27% interest

Month	Starting Balance	Interest	Total Payment	Ending Balance
1	\$3,200	$\frac{\$3,200 \times .27}{12} = \72.00	$\$640 + \$72 = \$712$	$\$3,200 - \$712 = \$2,560$
2	\$2,560	$\frac{\$2,560 \times .27}{12} = \57.60	$\$640 + \$57.60 = \$697.60$	$\$2,560 - \$697.60 = \$1,862.40$
3	\$1,863	$\frac{\$1,862.40 \times .27}{12} = \41.904 Round up \$41.91	$\$640 + \$41.91 = \$681.91$	$\$1,862.40 - \$681.91 = \$1,180.49$
4	\$1,181.09	$\frac{\$1,180.49 \times .27}{12} = \26.56	$\$640 + \$26.56 = \$666.55$	$\$1,181.09 - \$666.55 = \$514.54$
5	\$514.54	$\frac{\$514.54 \times .27}{12} = \11.57715 Round up \$11.58	$\$640 + \$11.58 = \$651.58$	$\$651.58 - \$514.54 = \$137.04$ extra

Page 83: Debt Consolidation

There is no monthly savings, she still is paying \$200 per month

$\$200 \times 36 = \$7,200$

Answers will vary

Page 85: Debt to Income Ratio

Gross income: $\$72,000 \div 12 = \$6,000$

Monthly debt obligation: $\$350 + \$250 + \$100 + \$1,600 = \$2,300$

Debt to income ratio: $\frac{\$2,300}{\$6,000} \times 100 = 38.3\%$

Yes, she will qualify

Page 86: Quiz

1 = Avalanche

2 = Debt Consolidation

3 = True

4 = True

5 = $\$1,200 + \$300 + \$100 = \$1,600 \rightarrow (\$1,600 \div \$5,000) \times 100 = 32\%$

6 = C, D, A, B

Page 92: Financial Wisdom

\$45.75

\$13.07

Answers will vary

Answers will vary

Page 93: Checking Accounts

Emily: \$2,260 total, \$105 for tickets

Kinley: No she doesn't have enough money

Andrew: \$1,800 (6 x \$300)

Page 97: Let's Keep A Record

Check #	Date	Description	Payment	X	Deposit	Balance
						\$473.62
	11/28/24	Deposit		x	\$276.35	\$749.97
	11/30/24	House of Pie	\$8.65	x		\$741.32
	12/01/24	Game Store	\$41.49	x		\$699.83
0618	12/01/24	Gas Station	\$64.88			\$634.95
	12/02/24	Book Store	\$71.35	x		\$563.60

Page 98: Quiz

1 = B

2 = C

3 = True

4 = True

5 = Deposit (or credit), withdraw

6 = B, A, C

Page 99: Savings Account

Tim: $\$190 \div \$15 = \$12.66666666$. Rounding up it will take 13 weeks

Victoria: $\$9 \times 4 = \36

Doug: 52 weeks in a year, 6 months = 26 weeks,

$26 \times \$12 = \312 ---> Allowance $\$40 \times 6 = \240

Total Savings: $\$312 + \$240 = \$552$

Kristy:

Saving $\$39.58$ leaves her a little short, she would need to round up and save $\$39.59$ to meet her goal.

Matt: $\$1,387 \times 0.015 = \20.805 (round up $\$20.81$) in interest per month. $6 \times \$20.81 = \124.86

Page 100: Savings

Gail: Saved \$370 dollars, it would take her 8.11 months (round up to 9 months.) She would need to save a total of \$750 each month (half of 8 months is 4 months, $\$3,000 \div 4 = \750)

Page 102: HYSA

Year	Beginning Balance	Interest	Ending Balance
1	\$2,000	\$90.00	\$2,090
2	\$2,090	\$94.05	\$2,184.05
3	\$2,184.05	\$98.28	\$2,282.33
4	\$2,282.33	\$102.70	\$2,385.03
5	\$2,385.03	\$107.33	\$2,492.36
6	\$2,492.36	\$112.16	\$2,604.52
7	\$2,604.52	$\$2,604.52 \times 0.045 = \117.20	$\$2,604.52 + \$117.20 = \$2,721.72$
8	\$2,721.72	$\$2,721.72 \times 0.045 = \122.48	$\$2,721.72 + \$122.48 = \$2,844.20$
9	\$2,844.20	$\$2,844.20 \times 0.045 = \127.99	$\$2,844.20 + \$127.99 = \$2,972.19$
10	\$2,972.19	$\$2,972.19 \times 0.045 = \133.75	$\$2,972.19 + \$133.75 = \$3,105.94$
11	\$3,105.94	$\$3,105.94 \times 0.045 = \139.77	$\$3,105.94 + \$139.77 = \$3,245.71$
12	\$3,245.71	$\$3,245.71 \times 0.045 = \146.06	$\$3,245.71 + \$146.06 = \$3,391.77$

Page 103: Keep The Change

$$\text{Bri} = .80 + .89 + .88 + .55 + .72 + .48 = \$4.32$$

Answers will vary

Page 104: Bank Statement

Spent: \$254

Credit: \$540

No

Answers will vary

Page 105: Debit vs. Credit Card

Answers will vary

Page 106: Quiz

1 = B

2 = B

3 = True

4 = False

5 = True

6 = 0.65

7 = Answers will vary

Page 108: BNPL Exercises

$$1 = \$75 + \$15 = \$90$$

$$2 = \$345 (\$300 + \$15 + \$30)$$

3 = Answers will vary

$$4 = \$87.50 (\$175 \div 4 = \$43.75 \text{ per payment}) \text{ She made 2 payments, leaving 2 left to pay}$$

$$2 \times \$43.75 = \$87.50$$

$$5 = \$187.50 \text{ owed on text books } (\$250 \div 4 = \$62.50 \text{ per payment}) \text{ She made 1 payment, leaving 3 remaining payments } (3 \times \$62.50 = \$187.50)$$

$$6 = \$275.00 (\$87.50 + \$187.50 = \$275)$$

Page 110: Rent to Own

$$\text{Option 1} = \$12.0 \times 52 = \$660.40$$

$$\text{Option 2} = \$9.24 \times 78 = \$720.72$$

$$\text{Option 3} = \$8.08 \times 104 = \$840.32$$

$$\text{Option 4} = \$54.99 \times 12 = \$659.88$$

$$\text{Option 5} = \$39.99 \times 18 = \$719.82$$

$$\text{Option 6} = \$34.99 \times 24 = \$839.76$$

$$\text{Option 1} = \$660.40 - \$449.99 = \$210.41$$

$$\text{Option 2} = \$720.72 - \$449.99 = \$270.73$$

$$\text{Option 3} = \$840.32 - \$449.99 = \$390.33$$

$$\text{Option 4} = \$659.88 - \$449.99 = \$209.89$$

$$\text{Option 5} = \$719.82 - \$449.99 = \$269.83$$

$$\text{Option 6} = \$839.76 - \$449.99 = \$389.77$$

Answers will vary

Page 111: Quiz

1 = B

2 = D

3 = False

4 = True

5 = $\$20 \times \$50 = \$1,040$, answers will vary

6 = Looks like cost is lower, which increases customers willingness to spend

7= A) BNPL, B) RTO, C) Credit card

Page 114: Credit Score

325, 475, 560, 680, 785, 8,15

Thomas: High.

Heather: in the middle

Steve: Low

Peggy, the first choice is better, because less will be paid in interest

Page 116: Credit Card Interest

December: $\$135.85 \times 0.235 = \31.92 ---> $\$135.85 + \$31.92 = \$167.77$

January: $\$167.77 \times 0.235 = \39.4259 (round up $\$39.43$) ---> $\$167.77 + \$39.43 = \$207.20$

Answers will vary

Page 117: Credit Interest

$$\text{Zach: } \frac{0.2899}{12} = 0.024155$$

Month	Balance	Interest	Interest + Balance	Ending
March	\$5,876.59	$\$5,876.59 \times 0.024158 = \141.97	$\$5,876.59 + \$141.97 = \$6,018.56$	$\$6,018.56 - \$195 = \$5,823.56$
April	\$5,823.56	$\$5,823.56 \times 0.024158 = \140.68	$\$5,823.56 + \$140.68 = \$5,964.24$	$\$5,823.56 - \$195 = \$5,769.24$
May	\$5,769.24	$\$5,769.24 \times 0.024158 = \139.37	$\$5,769.24 + \$139.37 = \$5,908.58$	$\$5,769.24 - \$195 = \$5,713.61$
June	\$5,713.61	$\$5,713.61 \times 0.024158 = 138.029$ (round up to 138.03)	$\$5,713.61 + \$138.03 = \$5,851.64$	$\$5,851.64 - \$195 = \$5,656.64$
July	\$5,656.64	$\$5,656.64 \times 0.024158 = 136.65$	$\$5,656.64 + \$136.65 = \$5,793.29$	$\$5,793.29 - \$195 = \$5,598.29$
August	\$5,598.29	$\$5,598.29 \times 0.024158 = \135.24	$\$5,598.29 + \$135.24 = \$5,733.53$	$\$5,733.53 - \$195 = \$5,538.53$
September	\$5,538.53	$\$5,538.53 \times 0.024158 = \133.799 (round up to \$133.80)	$\$5,538.53 + \$133.80 = \$5,672.33$	$\$5,672.33 - \$195 = \$5,477.33$

Credit Utilization = 73.46%
 He paid a total of \$965.77 in interest
 0.024158 (2.4158%) interest per month ($0.2899 \div 12$)
 Answer will vary

Bethany:

$$\frac{\$800}{\$1,000} \times 100 = 80.00\% \quad \text{Credit utilization}$$

Interest: 19.85% as a decimal = $0.1985 \div 12 = 0.01654167$
 Convert it back to a percent: $0.01654167 \times 100 = 1.6542\%$

Page 118: Credit Card Interest

Bethany:

Month	Balance	Interest (balance x 0.016542)	Payment	Ending Balance
1	\$800.00	$\$800 \times 0.016542 =$ \$13.23	\$170	\$643.23
2	\$643.23	$\$643.23 \times 0.016542 =$ \$10.64	\$170	\$483.87
3	\$483.87	$\$483.87 \times 0.016542 =$ \$8.00	\$170	\$321.87
4	\$321.87	$\$321.87 \times 0.016542 =$ \$5.32	\$170	\$157.19
5	\$157.19	$\$157.19 \times 0.016542 =$ \$2.60	\$159.79 (adjusted final price)	0.00

Jason: 95% Credit utilization

$$\frac{0.1865}{12} = 0.0155416667 = 1.55416667\%$$

Page 119: Credit Card Interest

Jason

Month	Balance	Interest	Payment	Ending Balance
1	\$3,325	$\$3,325 \times 0.015541667 = \51.676 Round Up \$51.68	\$225	$\$51.68 + \$3,325 = \$3376.67$ $\$3,376.68 - \$225 = \$3,151.68$
2	\$3,151.68	$\$3,151.68 \times 0.015541667 = \48.98	\$225	$\$3,151.68 + \$48.98 = \$3,200.66$ $\$3,200.66 - \$225 = \$2,975.66$
3	\$2,975.66	$\$2,975.66 \times 0.015541667 = \46.246 Round up \$46.25	\$225	$\$2,975.66 + \$46.25 = \$3,021.91$ $\$3,021.91 - \$225 = \$2,796.91$
4	\$2,796.91	$\$2,796.91 \times 0.015541667 = \43.4686 Round up \$43.47	\$225	$\$2,796.91 + \$43.47 = \$2,840.38$ $\$2,840.38 - \$225 = \$2,615.38$
5	\$2,615.38	$\$2,615.38 \times 0.015541667 = \40.647 Round up to \$40.65	\$225	$\$2,615.38 + \$40.65 = \$2,656.03$ $\$2,656.03 - \$225 = \$2,431.03$
6	\$2,431.03	$\$2,431.03 \times 0.015541667 = \37.78	\$225	$\$2,431.03 + \$37.78 = \$2,468.81$ $\$2,468.81 - \$225 = \$2,243.81$
7	\$2,243.81	$\$2,243.81 \times 0.015541667 = \34.87	\$225	$\$2,243.81 + \$34.87 = \$2,278.68$ $\$2,278.68 - \$225 = \$2,053.68$
8	\$2,053.68	$\$2,053.68 \times 0.015541667 = \31.91	\$225	$\$2,053.68 + \$31.91 = \$2,085.59$ $\$2,085.59 - \$225 = \$1,860.54$
9	\$1,860.54	$\$1,860.54 \times 0.015541667 = \28.91	\$225	$\$1,860.54 + \$28.91 = \$1,889.45$ $\$1,889.45 - \$225 = \$1,664.45$

10	\$1,664.45	$\$1,664.45 \times 0.015541667 = \25.86	\$225	$\$1,664.45 + \$25.86 = \$1,690.31$ $\$1,690.31 - \$225 = \$1,465.31$
11	\$1,465.31	$\$1,465.31 \times 0.015541667 = \22.77	\$225	$\$1,465.31 + \$22.77 = \$1,488.08$ $\$1,488.08 - \$225 = \$1,263.08$
12	\$1,263.08	$\$1,263.08 \times 0.015541667 = \19.63	\$225	$\$1,263.08 + \$19.63 = \$1,282.70$ $\$1,282.70 - \$225 = \$1,057.70$
13	\$1,057.70	$\$1,057.70 \times 0.015541667 = \16.43	\$225	$\$1,057.70 + \$16.43 = \$1,074.13$ $\$1,074.13 - \$225 = \$849.13$
14	\$849.13	$\$849.13 \times 0.015541667 = \13.1968 Round up to \$13.20	\$225	$\$849.13 + \$13.20 = \$862.33$ $\$862.33 - \$225 = \$637.33$
15	\$637.33	$\$637.33 \times 0.015541667 = \9.09	\$225	$\$637.33 + \$9.09 = \$646.42$ $\$646.42 - \$225 = \$421.39$
16	\$421.39	$\$421.39 \times 0.015541667 = \6.549 Round up \$6.55	\$225	$\$421.39 + \$6.55 = \$427.94$ $\$427.94 - \$225 = \$202.94$
17	\$202.94	$\$202.94 \times 0.015541667 = \3.15	\$225	$\$202.94 + \$3.15 = \$206.09$ $\$225 - \$206.09 = \$18.91$ Extra

It takes 17 months to pay off
He paid \$446.40 in interest
He paid a grand total of \$3,807.07
If he made payments of \$275 he would pay it off in 14 months, paying \$387.14 in interest, and paying \$3,712.14 total

Page 122: Amortization

Month	Starting Balance	Interest	Interest Paid	Principal Equation	Principal Paid	Ending Balance
2	\$2,365.72	$\frac{\$2,365.72 \times 0.265}{12}$	\$52.24	\$175 - \$52.24	\$122.76	\$2,242.96
3	\$2,242.96	$\frac{\$2,242.96 \times 0.265}{12}$	\$49.53	\$175 - \$49.53	\$125.47	\$2,117.49
4	\$2,117.49	$\frac{\$2,117.49 \times 0.265}{12}$	\$46.76	\$175 - \$46.76	\$128.24	\$1,989.25
5	\$1,989.25	$\frac{\$1,989.25 \times 0.265}{12}$	\$43.93	\$175 - \$43.93	\$131.07	\$1,858.18
6	\$1,858.18	$\frac{\$1,858.18 \times 0.265}{12}$	\$41.03	\$175 - \$41.03	\$133.97	\$1,724.24
7	\$1,724.24	$\frac{\$1,724.24 \times 0.265}{12}$	\$38.08	\$175 - \$38.08	\$136.92	\$1,587.29
8	\$1,587.29	$\frac{\$1,587.29 \times 0.265}{12}$	\$35.05	\$175 - \$35.05	\$139.95	\$1,447.34
9	\$1,447.34	$\frac{\$1,447.34 \times 0.265}{12}$	\$31.96	\$175 - \$31.96	\$143.04	\$1,304.30
10	\$1,304.30	$\frac{\$1,304.30 \times 0.265}{12}$	\$28.80	\$175 - \$28.80	\$146.20	\$1,158.10
11	\$1,158.10	$\frac{\$1,158.10 \times 0.265}{12}$	\$25.57	\$175 - \$25.57	\$149.43	\$1,008.67
12	\$1,008.67	$\frac{\$1,008.67 \times 0.265}{12}$	\$22.27	\$175 - \$22.27	\$152.73	\$855.94

13	\$855.94	$\frac{\$855.94 \times 0.265}{12}$	\$18.90	\$175 - \$18.90	\$156.10	\$699.84
14	\$699.84	$\frac{\$699.84 \times 0.265}{12}$	\$15.45	\$175 - \$15.45	\$159.55	\$540.29
15	\$540.29	$\frac{\$540.29 \times 0.265}{12}$	\$11.93	\$175 - \$11.93	\$163.07	\$377.22
16	\$377.22	$\frac{\$377.22 \times 0.265}{12}$	\$8.33	\$175 - \$8.33	\$166.67	\$210.55
17	\$210.55	$\frac{\$210.55 \times 0.265}{12}$	\$4.65	\$175 - \$4.65	\$170.35	\$40.20
18	\$40.20	$\frac{\$40.20 \times 0.265}{12}$	\$0.89	\$41.09 - \$.89	\$40.20	\$0.00

It takes 18 month to pay off the debt, and \$530.27 is paid in interest

Page 123: Amortization

Month	Starting Balance	Interest	Interest Charge	Percent to Interest	Percent to Balance
1	\$2,485.82	$\$2,485.82 \times 0.0220833$	\$54.90	31.37%	68.63%
2	\$2,365.72	$\$2,365.72 \times 0.0220833$	\$52.24	29.85%	70.15%
3	\$2,242.93	$\$2,242.96 \times 0.0220833$	\$49.53	28.30%	71.70%
4	\$2,117.49	$\$2,117.49 \times 0.0220833$	\$46.76	26.72%	73.28%
5	\$1,989.25	$\$1,989.25 \times 0.0220833$	\$43.92	25.09%	74.91%

6	\$1,858.18	$\$1,858.18 \times 0.0220833$	\$41.03	23.44%	76.56%
7	\$1,724.22	$\$1,724.22 \times 0.0220833$	\$38.07	21.75%	78.25%

Page 125: Quiz

1 =

2 = B

3 = False

4 = True

5 = Answers will vary

6 = Answers will vary

Page 128: Compound Interest

Annually: \$1,102.50

Quarterly: 1,104.49

Monthly: \$1,104.94

Weekly \$1,105.12

Kelsi got the best deal

Page 131: Quiz

1 = True

2 = False

3 = Year 1: \$1,100, Year 2: \$1,210

Year 1 interest is 10% of the principal (\$100 + \$1,000 = \$1,100)

Year 2 interest is 10% of \$1,100 = \$1,210 (\$1,100 + \$110)

4 = Person C, Person A, Person B

FV = Future Value P = Contribution r = interest rate

n = number of compounding periods PV = present value A = Final Amount

Person A: Age 25 - 35

$$FV = \$200 \times \frac{(1 + 0.08)^{12 \times 10}}{\frac{0.08}{12}}$$

$$FV = \$200 \times \frac{(1.00667)^{120-1}}{0.00667} = \$36,589.21$$

Age 35 to 65

$$A = \$36,589.21 \times \left(1 + \frac{0.08}{12}\right)^{12 \times 30} \quad A = \$36,589.21 \times (1.006667)^{360} = \$400,129.68$$

Person B

$$FV = \$200 \times \frac{(1 + 0.08)^{12 \times 30} - 1}{\frac{0.08}{12}} \quad FV = \$200 \times \frac{(1.006667)^{360} - 1}{0.00667} = \$298,071.89$$

Person C

$$FV = \$200 \times \frac{\left(1 + \frac{0.08}{12}\right)^{12 \times 40} - 1}{\frac{0.08}{12}} \quad FV = \$200 \times \frac{(1.006667)^{480} - 1}{0.00667} = \$698,201.57$$

Page 132: Insurance

A = Blurry Vision

B = The dog ate a sock

C = Need braces

D = Hailstorm Room damage

E = Got a new car

F = Frequent traveler

Page 133: Rent

Jean:

$$\$125 + \$1,000 + \$2,500 + \$75 = \$3,700 \text{ total}$$

Net change = New Apartment - (Air BnB + Storage)

$$\text{Net Change} = \$1,200 - (\$1,000 + \$125)$$

$$\text{Net Change} = \$1,200 - \$1,125 = +\$75$$

Page 134: Rental Items

Korey:

Most expensive car: Sports car $30 \times \$80 = \$2,400$ just for the car

Insurance: $\$10 \times 30 = \300

$$\$2,400 + \$300 = \$2,700$$

Least expensive car: Compact car: $\$35 \times 30 = \$1,050$

Insurance: $\$5 \times 30 = \150

$$\$1,050 + \$150 = \$1,200$$

Least expensive house: Modern House $\$120 \times 30 = \$3,600$

Most Expensive house: Country Home $\$225 \times 30 = \$6,750$

Answers will vary

Randy:

$\$150 \times 4 = \600

$\$200 \times 4 = \800

$\$600 + \$800 = \$1,400$

Entertainment center:

11 hours divided by 3 hours = 3 parties per room, per day

3 parties $\times$ 4 rooms = 12 parties total

2 extra hours $\times$ 4 rooms = 8 extra hours all together

Thomas:

Total Rent = Monthly Rent $\times$ Lease term (in months)

Total rent = $\$2,800 \times 9 = \$25,200$

Lawn Mower:

Total Cost = Base Fee + (daily rate $\times$ number of days)

Total cost: $\$13.50 + (\$15 \times 2)$

$\$15 \times 2 = \30

Total Cost: $\$13.50 + \$30 = \$43.50$

Page 135: Lease

You are responsible for fixing the fence

The Landlord is responsible for the carpet

Answers will vary

Page 137: Costs of Home Ownership

Tia and Brian:

Mortgage: $\$1,400$

Home Insurance $\$100$

Maintenance: $\$200$

Utilities $\$350$

Total: $\$1,400 + \$100 + \$200 + \$350 = \$2,050$

Money will come from either the maintenance fund or emergency fund

Leah:

$\$1,80 + \$150 + \$50 = \$2,450$

Page 138: Costs of Car Ownership

Down Payment: $\$8,500 \times 0.20 = \$1,700$

Sale Tax: $\$8,500 \times 0.08 = \680

License and Registration: \$125

Insurance \$375 every 6 months ($\$375 \div 6 = \62.50 per month)

Total Due at Signing: $\$1,700 + \$680 + \$125 + \$375 = \$2,880$

Monthly Outflow: $\$304.15 + \$150 = \$454.15$

Page 139: Quiz

1 = False

2 = True

3 = \$1,900 ($\$2,400 - \500)

4 = A

5a = $\$18 \times 78 = \$1,404$

5b = $\$1,404 - \$600 = \$804$

Page 140: Property Tax

Public education, public safety, infrastructure and transportation. public services and health, parks and community facilities, local government

Property Tax is for real estate

Personal Property Tax is for tangible moveable items

Page 141: Capital Gains Tax

$20 \times \$150 = \$3,000$

$\$350 \times 20 = \$7,000$

$\$7,000 - \$3,000 = \$4,000$

Page 142: Appreciation

Dollar Increase: $\$75 - \$1.50 = \$73.50$

Percentage Increase: $(\$73.50 \div \$150) \times 100 = 4,900\%$

Value Multiplier: $\$75 \div \$1.50 = 50$ times (50x)

Page 143: Depreciation

Printer:

$$\$450 - \$50 = \$400$$

$$\$400 \div 3 = \$133.33 \text{ per year}$$

PAGE 145: Inflation

Answers will vary depending on what part of the US you are in

Eggs: 97.29%

Flour: 113.42%

Soda: \$139.71%

Milk: 51.64%

Page 146: Recession

Because people are spending less money, which means business are making less, and can't afford to hire new workers.

Because you can miss the big recovery that can happen after a recession, which means you miss out on money

Page 147: Quiz

1 = Capital Gains Tax

2 = True

3 = False

$$4a = \text{Total capital gain: } (\$115 - \$45) \times 200 = \$14,000$$

$$4b = \text{Tax liability} = \text{total capital gain} \times \text{tax rate}$$

$$\$14,000 \times 0.15 = \$2,100$$

$$5a = \frac{\$65,000 - \$5,000}{5} = \frac{\$60,000}{5} = \$12,000 \text{ per year}$$

$$5b = \$65,000 - (\$12,000 \times 3) = \$65,000 - \$36,000 = \$29,000$$

Page 149: Stocks

Meal Delivery: $\$130$ ($10 \times \$13$)

Tech: $\$58$ ($2 \times \$29$)

Solar: $\$108$ ($9 \times \$12$)

He should have sold the Tech Stock

Meal Delivery gave the best ROI

Selling all his stock in Year 3 he would have made: $\$486$

$\$18 \times 10 = \180 Meal Delivery

$\$15 \times 2 = \30 Tech

$\$23 \times 12 = \276 Solar

All together $\$180 + \$30 + \$276 = \486

Selling in Year 6:

Meal Delivery: $\$30 \times 9 = \270

Solar: $26 \times \$12 = \312

Tech: $2 \times \$18 = \36

Total: $\$270 + \$312 + \$36 = \618

$\$618 - \$296 = \$322$ is what he would have made

Page 150: Index Funds

January: $\$50 + \$100 + \$1500 = \300

July: Restaurant: $\$250$, Liquid for Life: $\$150$, Move It: $\$175$

Increase (biggest) December: $\$225 + \$300 + \$265 = \790

Page 151: Mutual Funds

1 = $1,000 \times \$18 = \$18,000$

2 = Income per share = $.45 + .65 = \$1.10$ ---> $1,000 \times .10 = \$1,100$

3 = $1,000 \times 28.44 = \$28,440$

4 = Total Value Received: $\$28,440 + \$1,100 = \$29,540$

Net Profit = $\$29,540 - \$18,000 = \$11,540$

5 = $\left(\frac{\$11,540}{\$18,000} \right) \times 100 = 64.11\%$

Page 152: EFT

Initial Cost $50 \times \$212 = \$10,600$
Commission Fee" $\$10,600 + \$6.95 = \$10,606.95$
Basket, Diversification, intraday
 $\$80 \times 5 = \400

Page 153: Cryptocurrency

Rogan:

$$1 = 2\% = 0.02$$

$$2 = \$200 \times 0.02 = \$$$

$$\text{Tia: } \$3,100 - \$2,500 = \$600$$

Kayden:

$$0.032 \times 12 = 0.384$$

Gene:

$$0.02 + 0.003 = 0.023$$

Page 158 Quiz

$$1 = D$$

$$2 = B$$

$$3 = C$$

$$4 = \text{Initial Investment: } 50 \times \$40 = \$2000$$

$$\text{Final Value: } 50 \times \$48 = \$2,400$$

$$\text{Profit: } \$2,400 - \$2,000 = \$400$$

$$\text{ROI: } (\$400 \div \$2,000) \times 100 = 20\%$$

$$5 = \text{Growth: } \$980 \times 1.15 = \$1,127$$

$$\text{Net Profit: } \$1,127 - \$1,000 = \$127$$

$$(\$127 \div \$1,000) \times 100 = 12.70\%$$

Page 159: Entrepreneur

Rogan: Medium Risk

Danielle: Low Risk

Tia: High Risk

Jarret: Low Risk

Page 160: Create A Business

Answers will vary

Page 161: Business

Laylani:

$$1 = \$18 \times 12 = \$216$$

$$2 = \$216 - \$35 = \$181$$

3 = Yes, her business is profitable

Fin:

$$1 = \$12 \times 20 = \$240$$

$$2 = 20 \times 15 = \$300$$

$$3 = \$240 - \$300 - \$60$$

4 = No, his business is losing \$60 dollars per month

Carley:

$$1 = \$20 \times 8 = \$160$$

$$2 = 8 \times \$4 = \$32 + \$50 = \$82$$

$$3 = \$160 - \$82 = \$78$$

4 = Yes, her business is profitable

Page 162: Helping a Business

Answers will vary

Page 163: Quiz

1 = Person who starts a business

2 = Organized activity or enterprise that provides goods or services

$$3a = 15 \times \$22 = \$330$$

$$3b = \$330 - \$85 = \$245$$

3c = Yes

$$4a = 4 \times \$25 = \$100$$

$$4b = \$100 - \$140 = - \$40$$

4c = No, her business is not profitable

5 = Contribution margin per shirt:

$$\$20 - \$8 = \$12$$

Take the fixed costs and multiply it by \$12

$$\$2,400 \div 12 = 200 \text{ Shirts}$$

Page 164: Supply and Demand

- 1 = Demand
- 2 = Supply
- 3 = Shortage
- 4 = Surplus
- 5 = Price
- 6 = Goes down
- 7 = Goes up
- 8 = High demand, and a shortage
- 9 = He could raise the price
- 10 = C

Page 166: Capital

\$55.75 is the amount of Capital that Pearl needs

Page 167: Goods and Services

Linda: received both a good (the books) and a service (the help finding the books)

Ryan: goods are what you get, service is provided by people. A movie theater give both goods (sodas, popcorn ect) and services (staff who help you)

Loraine: Both, if she changed them herself she would just be paying for the goods

Rebecca: it is a service, to get goods

Answers will vary

Page 168: Revenue and Net Profit

Linda:

Expenses: $\$7.50 + \$23.92 = \$31.41$

Revenue: $\$75$

Profit: $\$75 - \$31.42 = \$43.58$

Casey:

Expenses: $\$15.72 + \$5.23 + \$3.29 = \24.24

Revenue: $75 \times \$2.50 = \187.50

Profit: $\$187.50 - \$24.24 = \$163.26$

Page 169: Revenue and Net Profit

Sharon:

Revenue

Small: $14 \times \$10.95 = \153.30

Large: $5 \times \$18.95 = \94.75

Ultimate: $2 \times 34.95 = \$69.90$

$\$153.30 + \$94.75 + \$69.90 = \317.95

Expenses:

Total number of pack sold: $14 + 5 + 2 = 21$

Packaging: $21 \times \$1.95 = \40.95

Vinyl: $\$14.00$

Total Expenses: $\$40.95 + \$14.00 = \$54.95$

Net Profit: $\$317.95 - \$54.95 = \$263.00$

Kinley:

Expenses:

$\$35 + \$10 = \$45$

Revenue:

Cupcakes: $40 \times \$3 = \120

Cookies: $30 \times \$2 = \60

Brownies: $15 \times \$1.75 = \26.25

$\$120 + \$60 + \$26.25 = \206.25

Page 170: Quiz

1 = It is not market equilibrium, there is a surplus in the market

2 = Total revenue: $\$12,000$, Total Expenses: $\$3,500 + \$4,000 + \$1,500 = \$9,000$.

Net Profit: $\$12,000 - \$9,000 = \$3,000$

3 = $\$25 \times 400 = \$10,000$

4 = B

5 = C

Page 171: Assets

Jon:

$\$200 + \$350 + \$150 = \700

Claudia:

$\$1,500 + \$450 = \$1,950$

Fixed, Liquid, Fixed, Liquid

Page 172: Liabilities

$$1 = 9 \div 12 = 0.75$$

$$2 = \text{Principal} \times \text{Interest Rate} \times \text{Time} = \$60,000 \times 0.08 \times 0.75 = \$3,600$$

$$3 = \$60,000 + \$3,600 = \$63,600$$

Kris is responsible, because she did not follow the instructions that were given

Page 173: Cost of Making and Selling Items

$$\text{Entire material cost: } \$62.48 + \$28.39 + \$42.15 + \$6.18 + \$10.12 = \$149.32$$

$$\text{Overhead cost: } \$3 + \$12 + 4 = \$19$$

$$\text{Labor: } 96 \times \$18 = \$1,728$$

$$\text{Cost of making the quilt: } \$149.32 + \$19 + \$1,728 = \$1,896.32$$

Page 174: Cost of Making and Selling Items

Desired Markup Percentage	Retail Price	Final Selling Price	Profit
15% (low)	$\$1,896.32 \times (1 + 0.15) = \$2,179.62$	\$2,179.62	$\$2,179.62 - \$1,895.32 = \$284.30$
25% (standard)	$\$1,896.32 \times (1 + .25) = \$2,370.40$	\$2,370.40	$\$2,370.40 - \$1,896.32 = \$474.08$
50% (premium)	$\$1,896.32 \times (1 + .50) = \$2,844.48$	\$2,844.48	$\$2,844.48 - \$1,896.32 = \$948.16$

Allison and Emily:

$$\text{Total Revenue: } \$25 \times \$4 = \$100$$

$$\text{Expenses: } \$12 + \$18 = \$30$$

$$\text{Profit: } \$100 - \$30 = \$70$$

$$\text{Profit Split: } \$70 \div 2 = \$35$$

Page 175: Capital Gain

Ken:

$$\text{Cost of buying: } (50 \times \$45) + \$10 = \$2,260$$

$$\text{Selling: } (40 \times \$60) - \$10 = \$2,990$$

$$\text{Capital Gain: } \$2,990 - \$2,260 = \$710$$

Harold and Gail:

Cost: $210,000 + \$25,000 = \$235,000$

Realized Price (net proceeds): $\$315,000$ (sale) - $\$15,000$ (closing costs) = $\$300,000$

Capital Gain: $\$300,000 - \$235,000 = \$65,000$

Page 176: Pay Yourself First

Vern is being smarter because he is setting money aside

Patricia:

Savings = $\$20.00 \times 0.20 = \4.00

Spending: $\$20 - \$ = \16

Total Savings: $\$4 + \$8 = \$12$

Page 177: Profit and Loss

Cost of Goods sold increased by 27.41%

Calculate the Dollar Change: $\$172,000 - \$135,000 = \$37,000$

Divide the dollar change by the original amount: $\$37,000 \div \$135,000 = 0.2741$

Turn the decimal into a percent: $0.2741 \times 100 = 27.41\%$

Net Profit Year 1:

$\$105,000 \div \$450,000 = 0.233$

$0.233 \times 100 = 23.33\%$

Net Profit Year 2:

$\$58,000 \div \$465,000 = 0.1258$

$0.1258 \times 100 = 12.58\%$

Page 178: Quiz

1 = Total Value of Assets: $\$25,000 + \$8,000 = \$33,000$

Total Liabilities: $\$12,000 + \$1,500 = \$13,500$

2 = Raw Ingredients: $\$12$, Packaging: $\$3$, Direct Labor: $\$5$,

Cost per cake: $\$12 + \$3 + \$5 = \20

Cost of Goods Sold: $80 \times \$20 = \$1,600$

3a = $\$4,000 \times 0.15 = \600

3b = Personal savings, and long term financial security

4a = $\$14 + \$3 + \$5 = \22

4b = $\$22 \times 50 = \$1,100$

5 = C, $\$1,200$

$20 \times \$210 = \$4,200$

$20 \times \$150 = \$3,000$

Capital Gain: $\$4,200 - \$3,000 = \$1,200$

Page 181: Retirement

1 = $\$16 \times 40 = \640 gross weekly pay

$\$640 \times 52 = \$33,280$ gross annual pay

2 = Maximum weekly match: $\$640 \times 0.08 = \51.20

Maximum annual match: $\$33,280 \times 0.08 = \$2,662.40$

3 = Optimal weekly contribution: $\$51.20 \times 2 = \102.40 (exactly 16% of the weekly pay check)

Optimal annual contribution: $\$2,662.40 \times 2 = \$5,324.80$

Final Test

1 = A

2 = A

3 = B

4 = A

5 = C

6 = A

7 = B

8 = Things you need to survive

9 = Things that make life fun

10 = Being happy with what you have

11 = B

12 = C

13 = C

14 = B

15: Answers will vary

16 = B

17 = B

18 = A

19 = C

20 = B

21 = Anchoring

22 = B

23 = A

24 = B

25 = C

26 = 300, \$80, \$220, savings account and auto transfer it there

27 = \$6, \$10.80, \$76.80

28 = B

29 = B

30 = False

31 = True

32 = True

33 = True

34 = Answers will vary

35 = S = save money for specific vacation,

M = target savings goal \$1,200,

A = Yes it is achievable because \$200 is

less than 7% of the monthly income,

T = Time is 6 month $\$1,200 \div 6 = \200

per month

36 =

Needs: \$2,354.50

Wants: \$1,412.70

Savings/Debt: \$941.80

37 = C

38 = B

39 = Active you are working for it, passive

is like from investing

40 = Day active, Etsy/Active with passive

potential

41 = True

42 = False

43 = True

44 = False

45 = B

46 = C

47 = D

48 = B

49 = False

50 = False

51 = True

- 52 = Because it reduces the interest bearing principal on the loan
- 53 = A
- 54 = B
- 55 = $\$1,200 + \$150 + \$300 + \$100 = \$1,750$
 $\$1,750 \times 5 = \$8,750$
- 56 = Variable Expenses: $\$600$ (15% of $\$4,000$)
 Total Expenses: $\$2,200$ (fixed)+ $\$600$ (variable) = $\$2,800$
- Savings: $\$4,000$ (income) - $\$2,800$ (expenses) = $\$1,200$
- 57 = C
- 58 = D
- 59 = $\$2,200$, 36.67%
- 60 = Credit Card A = $\$40 + \$200 = \$240$
- 61 = B
- 62 = A
- 63 = Debit card comes directly from the linked bank account. Credit card you pay back later.
- 64 = $\$329.50$
- 65 = $-\$15, -\$50, -\$62, -\97
- 66 = B
- 67 = B
- 68 = $\$2.43$
- 69 = $\$2,196.25$
- 70 = B
- 71 = B
- 72 = A
- 73 = $\$1,300$, $\$700$ more
- 74 = $\$20, \80
- 75 = C
- 76 = B
- 77 = B
- 78 = $\$8,895$
- 79 = The pay off formula figures it out faster than making full tables
- 80 = B
- 81 = Interest is earned on interest and principal as time progresses
- 82 = B
- 83 = B
- 84 = C
- 85 = $\$2,475$
- 86 = C
- 87 = D
- 88 = Sold for $\$8,500$ bought for $\$5,000$.
 Capital Gain = $\$3,500$
- 89 = C
- 90 = B
- 91 = D
- 92 = Diversification. It spreads your money out, that way if one does bad, you don't lose all your money
- 93 = 50% high concentration, low diversification
- 94 = B
- 95 = C
- 96 = C
- 97 = A
- 98 = Number of goods made = Number of goods sold
- 99 = $\$9,900$ ($450 \times \$22$)
- 100 = $\$5,500, \$9,500$
- 101 = D
- 102 = C
- 103 = B
- 104 = $\$12,000, \$10,000, \$2,000$ profit
- 105 = Must be sold for profit, and the sale has to be executed to realize the gain
- 106 = B
- 107 = D
- 108 = Your person information can be stolen, use unique passwords, and check accounts frequently
- 109 = $\$1,000,000$
- 110 = $\$450, \50
- 111 = A high risk business requires lots of money up front. low risk businesses requires minimal up front costs
- 112 = A break even point is where the money that has been spent has been made back. Example: My daughters started a lemonade stand. They borrowed $\$15.50$ for supplies, they paid me back and still had money. The $\$15.50$ was their break even point

- 113 = Secured loans have items attached to them and the item can be repossessed if the loan is not paid. A unsecured loan is lower risk, and doesn't have anything attached to it
- 114 = Things you need to start the business. If you wanted a lemonade stand you would need: Cups, Lemonade, ice, a table, and a pitcher
- 115 = Business is any organization, enterprise, that is engaged in providing goods or services.