Student Lab Activities Workbook

Course Alignment: AP Business with Personal Finance (Units 3 & 5)

Student Name: _____

Date: _____

Class Period: _____

Welcome to Your Financial Decision Lab

In these self-guided labs, you will move beyond static formulas to test real-world financial cause and effect. Using the **Everyone Can Plan** simulator, you will model actual career earnings, trace how progressive taxes affect disposable cash flow, explore the wealth-building power of compound interest, and test major life milestones—100% privately on your device.

Your role for these labs:

You do not need to calculate tax tables, build loan amortization schedules, or compute compound interest formulas by hand. The deterministic engine handles the mathematical calculations automatically. Your role is to test financial decisions—entering a starting salary, adjusting savings percentages, and setting life milestones—to analyze the real-world cause and effect on your cash flow and net worth.

How this model works

Everyone Can Plan models household finances the way life actually works, removing the guesswork without overcomplicating the math:

- **Covering Lean Years with Cash:** If your expenses top your income in a given year, the app doesn't treat your plan as broken. Instead, it automatically pulls

from your everyday liquid accounts—like savings, checking, or brokerage—to cover living costs and loan payments. This is how finances work in reality, as you naturally draw on cash reserves to handle shortfalls before touching long-term retirement funds.

- **Loans Pay Off and Disappear:** Fixed debts like mortgages, car loans, and student debt are paid down month by month. The moment a balance hits zero, the loan drops off your budget automatically, instantly freeing up that monthly payment for savings or other needs.
- **Instant Expense Estimates:** Instead of forcing you to guess dozens of tiny grocery and utility bills from scratch, the app looks at your real take-home pay (after taxes and deductions) and uses typical household spending averages to build a realistic starting budget. You can adjust any category whenever you like.
- **Automatic Social Security:** For U.S. profiles, entering your salary instantly calculates an estimated Social Security benefit based on your planned retirement age and inflation. You can use the estimate right away or type in your exact number from your Social Security statement.
- **Global Reach, Local Rules:** While this evaluation focuses on the U.S. in English, the underlying engine is built to support 26 countries and 17 languages. It can automatically estimate living costs, payroll deductions, progressive income taxes, and public pension benefits using each nation's distinct tax and retirement system
- **Non-Advisory Educational Tool: Everyone Can Plan** provides self-directed modeling for educational and informational purposes only. It acts as an advanced financial simulator and does not provide regulated financial, investment, tax, legal, or insurance advice, nor does it recommend specific strategies or financial products.

Lab 1: The Career Starting Line (Gross vs. Net Pay)

- **Curriculum Alignment:** Unit 5 (Progressive Taxation, FICA, Net Disposable Income, and Emergency Liquidity)
- **The Goal:** Model an entry-level career salary to discover how statutory withholdings shape real take-home pay, and evaluate how long initial cash reserves will sustain a household.
- **Scenario Profile:** You are **Quinn (Age 25)**, earning an entry-level salary of **$75,000** with **$4,000** in starting savings and a baseline **2% payroll savings deduction**.

Step-by-Step Instructions

1. Launch the app and proceed through the initial **Terms and Conditions (EULA)** screen. *(If testing on an existing session, navigate to **Settings > Reset** to restore a clean environment.)*
2. Tap through the initial introductory screens to open the **Household Profile** builder.
3. Tap the **+** button to add an adult user. Enter the name **Quinn** and set the age to **25**. Explain that this configures baseline accounts for the free sandbox tier (Salary, Savings, 401(k), Student Loans, and Credit Cards). Leave the default account selections active, tap **Save** , and tap **Next**.
4. Confirm tax status & country override:
    a. **U.S. students**: Leave the defaults (Country = United States, Tax filing status = Single, and Residence = California) and tap **Next**.
    b. **Students outside the U.S.**: If the app auto-detects a non-U.S. country from your device (for example, Hong Kong, Canada, U.K., or Mexico), tap the Country dropdown during onboarding and select United States so your plan uses U.S. tax brackets, FICA, and USD for AP coursework (or keep your local country if running a non-U.S. comparison). Once setup finishes, the country is locked—use Settings → Reset if you need to switch countries later. Tap **Next**.
5. **Add current Income values** - Tap the **Salary** card. Enter **$75,000**. Tap **Deductions > Savings Account**, set the deduction rate to **2%**, and tap **Save** . Note that all income can have adjustable start and stop years.
6. Observe the **Social Security** card. In US profiles for individuals age 22 and older, the model estimates benefits automatically. Note the distinction between **Present Value** and **Future Value** (adjusted using the non-adjustable 15-year historical inflation rate found under **Settings > Rates**). Tap **Cancel** to return to the Income list, then tap **Next**.
7. **Add current asset and debt values -** Tap the **Savings Account** card. Set the base balance to **$4,000** and adjust the annual return rate to **4%**. Tap **Save** , then tap **Next**.
8. **Estimate expenses** - Review the **Expenses** screen. Note that living baselines populate automatically based on US household expenditure benchmarks applied to net disposable income (after federal (single-filer) and state income taxes, as well as FICA deductions). All expenses with exception of Taxes and Deductions (both are calculated) are editable, but provide an initial assist to develop a plan. Tap **Next**.
9. Review the onboarding confirmation summary and tap **Done** to enter the primary application dashboard.

10. **Explore Tab 1 — Summary:** This is the operational dashboard. At a glance, the user sees their overall Plan Health score, liquid cash runway, and net worth trajectory. It bridges daily financial habits with long-term goals without overwhelming them with spreadsheets. We use the Plan Health score as intentional gamification—these are students, and a visible score gives them instant feedback, motivates them to engage deeper with the app, and shows them exactly which areas to improve to strengthen their financial future. We also include active tracking for both goals and actions. Looking at Quinn's baseline plan: in the Summary tab, you see the multi-decade cash flow chart alongside summaries for plan health, active goals, and action progress. Notice that the current plan status highlights a shortage of funds near the end of the plan. Under Emergency Funds, Quinn's $4,000 in liquid savings covers only **1.2 months of expenses,** yielding an initial projected **net worth of $198K at retirement**. Further down are suggested goals and actions tailored specifically to Quinn's plan, followed by the net worth growth chart and key performance metrics like effective tax rate and savings rate
11. **Explore Tab 2 — Accounts:** Examine the central balance sheet where all earned income streams, expense categories, liquid assets, and debts are managed. Tap **Expenses > Taxes**. Review the underlying tax schedules and social contributions (FICA, etc).
12. **Explore Tab 3 — Events:** Point out the timeline layer where non-destructive future life milestones—such as career changes, housing purchases, and retirement transitions—are layered dynamically over the baseline.
13. **Explore Tab 4 — Plan:** Review the Investment history, including asset allocation history, retirement reporting, and interactive decision sandboxes (Future Value, Home Affordability, Rent vs. Buy, Lease vs. Purchase), and important documents.
14. **Explore Tab 5 — Settings:** Review core economic assumptions (inflation benchmarks, historical equity returns), active appearance themes, and the one-tap **Reset** function.

Where to Look & What to Observe

- **Summary Tab (Emergency Runway):** Locate the **Emergency Funds** metric card. Notice that $4,000 in liquid savings covers only **1.2 months** of essential living expenses.
- **Summary Tab (Retirement Trajectory):** Note the projected net worth at retirement displays **$198,000** due to late-stage cash shortfalls.
- **Accounts Tab (Taxes & Outflows):** Inspect the expense breakdown to see automated progressive income tax and FICA deductions.

Student Analysis & Reflection Questions

1. Identify the difference between Quinn's gross salary ($75,000) and net disposable take-home pay. What mandatory deductions were automatically subtracted before Quinn received spendable cash?

2. Quinn earns a solid starting salary of $75,000, yet the emergency reserve covers barely five weeks (1.2 months) of living expenses. Explain why a high gross income does not automatically guarantee personal financial security.

3. **Trade-Off Analysis:** Quinn's initial 2% payroll deduction saves only $125/month, leaving more cash available for immediate lifestyle spending. What long-term financial vulnerability does this trade-off create?

Lab 2: Spending vs Savings Decision (Compounding vs. Speculative Outflows)

- **Curriculum Alignment:** Unit 3 & Unit 5 (Opportunity Cost, Compound Interest, and Employer 401(k) Matching)
- **The Goal:** Quantify the true 10-year economic impact of diverting $50/week from speculative spending (e.g., sports betting or unmonitored subscriptions) into compounding retirement assets.
- **Scenario Profile:** Standalone sandbox (zero alteration to baseline plan).

Step-by-Step Instructions

1. From the bottom navigation bar, tap the **Plan** tab.
2. Tap the **Investment History** card header to collapse it, scroll to the **Planning Calculators** section, and tap **Future Value**.

3. Under the **Amount** field, enter **$50** (representing 5% of a $60,000 salary redirected from speculative outflows). Set the **Frequency** to **Weekly,** and **Years = 10**.
4. Set **COMPARE WITH** to the **Employer retirement plan** (401k). Use the default return of 6%
5. **View COMPARISON CHART** (scroll down) **:** Explain that sports wagering and prediction markets carry a negative house edge (-8%) and represent pure consumption. After 10 years and $26,000 wagered, accumulated asset value is less than the amount wagered. The same amount used for a 401K actually grows to $53,397. Which is a net gain of $27,397!
6. Conclude the exercise by discussing the core takeaway: the true cost of speculative wagering is not merely the money lost, but the **$26,000 to $53,397 in lost foundational wealth**. Tap the close icon to return to the Plan tab.

Where to Look & What to Observe

- **The Speculative Outflow Line:** Over 10 years, $50/week totals **$26,000** in out-of-pocket spending. Due to house edge friction and consumption, the accumulated asset value is less than the principal spent.
- **The Compounding 401(k) Line:** The identical $50/week channeled into an employer-matched retirement account compounds into **$53,397**.
- **The Net Difference:** Bounding the two paths reveals a net wealth gap of **+$27,397**.

Student Analysis & Reflection Questions

1. In economics, **opportunity cost** is the value of the next best alternative given up when making a choice. Why is the true cost of spending $50/week on speculative bets significantly higher than just the $26,000 wagered?

2. How does an employer matching contribution act as immediate financial leverage in wealth accumulation?

Lab 3: Expanding Purchasing Power (Home Affordability & Savings Discipline)

- **Curriculum Alignment:** Unit 3 & Unit 5 (Debt-to-Income Limits, Down Payments, and Forward Planning)
- **The Goal:** Evaluate how adjusting your monthly payroll savings rate changes mortgage qualification limits and down payment accumulation over a 4-year horizon.
- **Scenario Profile: Quinn (Age 25)**, active plan.

Step-by-Step Instructions

1. Tap the **Plan** tab from the bottom navigation bar.
2. Scroll to the **Planning Calculators** section and tap **Home Affordability**.
3. Observe the automated input ingestion: the calculator automatically imports Quinn's gross annual income $75,000, and his current salary deduction of 2%
4. Set the **Purchase year** to 4 years from now.
5. Notice the Annual Income is now projected to be $83,142 after adjusting for Future Value (using inflation rate of 2.61%).
6. Also see that the initial $4,000 of savings, including the 2% salary deduction, and 4% rate of return, is $13,409.
7. Scroll further down if needed to adjust Loan details and explain the purpose of DTI, down payment, etc. Any adjustment updates the graph at the bottom of what Quinn can afford.
8. **Adjust the Salary deduction from 2% to 8%**
9. Observe the recalculated outcome:
    a. Projected down payment savings expand to over **$39,037**.
    b. Maximum qualifying purchasing power rises from **$67,045 to $195,185**.
10. Tap the close icon to exit the calculator.

Where to Look & What to Observe

- **Down Payment Growth:** Moving the deduction from 2% to 8% expands projected savings reserves from **$13,409** to **$39,037**.
- **Purchasing Power Expansion:** Maximum qualifying home price jumps from **$67,045** up to **$195,185**.

Student Analysis & Reflection Questions

1. Record the comparison metrics between the two savings behaviors:
    - **2% Savings Rate:** Down Payment = $_____ | Max Home Price = $_____

    - **8% Savings Rate:** Down Payment = $_____ | Max Home Price = $_____
2. Quinn did not receive a raise or change jobs, yet the maximum qualifying home price nearly tripled. What economic mechanisms caused this expansion?

3. **Trade-Off Analysis:** Bumping the savings rate to 8% reduces Quinn's monthly take-home spending cash by approximately $375/month. Is this short-term reduction in disposable income justified by the 4-year homeownership outcome? Defend your position.

Lab 4: Layering a Major Milestone (Buying a First Home)

- **Curriculum Alignment:** Unit 5 (Capital Reallocation, Tangible Assets, and Multi-Decade Solvency)
- **The Goal:** Model the multi-decade cause and effect of purchasing a first home, tracking down-payment cash withdrawals, debt amortization, and tangible equity appreciation.
- **Scenario Profile: Quinn (Age 25)**, 8% baseline savings rate.

Step-by-Step Instructions

1. **Reset to a Clean Sandbox:**
   Tap the **Settings** tab from the bottom navigation bar, scroll to the bottom, and tap **Reset** to clear any prior scenario data and launch onboarding.
2. **Configure the Baseline with an 8% Savings Rate:**
    a. Create an adult profile for **Quinn**, Age **25**.
    b. In the **Salary** card, enter **$75,000** and set the **Savings Account Deduction** to **8%** (bumping it from the standard 2% default).
    c. In the **Savings Account** card, set the initial balance to **$4,000** with an assumed annual rate of return of **4%**.
    d. Tap through the remaining estimated expenses and tap **Done** to enter the primary dashboard.

3. **Verify Expanded Baseline Liquidity:**
   On the **Summary** tab, review Quinn's starting metrics under the 8% savings discipline:
   a. Emergency cash reserves now cover **2.4 months** of living expenses right away (up from 1.2 months under a 2% deduction).
   b. Projected net worth at retirement reaches approximately **$744,000** (compared to just $198,000 under the 2% baseline).
4. **Add the First Home Milestone:**
   a. Tap the **Events** tab from the bottom navigation bar.
   b. Under the **Future Events** section, tap the card to expand it and select **Add Future Event**.
   c. Select **Buy First Home** from the event library (the dedicated milestone included in the free baseline).
5. **Configure Purchase Parameters & Inspect Validation:**
   a. Set the **Purchase Year** to **4** years from now.
   b. Set the **Future Purchase Price** to **$165,000**.
   c. Observe the validation card turning **Green ("This home appears affordable")**: the engine cross-references Quinn's projected liquid savings and back-end debt-to-income (DTI) ratio to confirm that the down payment and loan payments are fully supported.
   d. Tap **Save**  to confirm, then return to the main Events view to verify that **Buy First Home** is now active on the timeline.
6. **Analyze the Capital Shift on the Summary Dashboard:**
   Return to the **Summary** tab and inspect the multi-decade changes:
   a. **Down Payment Withdrawal:** Quinn's projected retirement net worth adjusts to approximately **$435,000** because liquid cash was reallocated to pay the upfront down payment and ongoing homeownership costs.
7. **Inspect Balance Sheet & Cash Flow Dynamics in the Net Worth Chart:**
   Scroll down on the Summary tab and tap the **Net Worth** card to open the detailed multi-decade chart:
   a. **The Down Payment Dip:** In Year 4 years from now, observe a visible dip in liquid savings where the down payment is deducted directly from cash reserves.
   b. **Working Years Growth:** From Year 4 years from now to age 62, savings resume positive compounding, bolstered by ongoing 8% payroll deductions and investment returns.
   c. **Retirement Transition:** At age 62, salary deductions end because earned income ceases. Because Social Security benefits alone do not fully cover living costs, the engine automatically sweeps remaining liquid savings year-by-year to offset the negative cash flow deficit until cash reserves are exhausted.

    d. **Tangible Asset Growth:** Observe the steady upward trajectory of the real estate asset (Home Equity), which continues to compound and appreciate independently of the amortizing mortgage, preserving household wealth even as cash accounts draw down.
8. **Reverse the Event:**
    a. Because all future life events are non-destructive and can be removed without altering the underlying baseline, tap the Events tab.
    b. Locate **Buy First Home**, swipe left on the card, and tap the **Delete** button.
    c. Tap the **Summary** tab: verify that the retirement net worth immediately snaps back to $744,000, the down payment cash dip disappears, and the baseline plan is fully restored without data corruption.
9. With Quinn's home purchase active in Year 4, tap the Events tab from the bottom navigation bar.
10. Under the Future Events section, tap **Add Future Event.**
11. From the Work group, select **Job Change** (included in the free baseline).
12. Configure the Promotion Parameters:
    a. Set Start Year to Year 5 (one year following the home purchase).
    b. Under Income Change, adjust the stepper to +15% (representing a career promotion from associate to senior role).
    c. Tap **Save**  to activate the promotion on the timeline.
13. Analyze the Multi-Decade Impact on the Summary Dashboard:
    a. Return to the Summary tab and inspect the Cash Flow chart: Observe that spendable cash flow steps visibly upward, easily absorbing the ongoing mortgage debt service, property taxes, and home maintenance.
    b. Inspect Emergency Runway: Because Quinn's 8% payroll savings deduction now calculates against a higher earned salary, liquid cash rebuilds rapidly post-closing, restoring emergency reserves from 1.4 months back above 3.5 months within two years.

Where to Look & What to Observe

- **The Down Payment Dip (4 years from now):** In the Net Worth chart, observe the immediate drop in liquid savings as accumulated cash is deployed for the down payment and closing costs.
- **Retirement Projection Adjustment:** Retirement net worth adjusts to **$435,000** because cash was reallocated to property equity and ongoing ownership expenses rather than remaining in high-compounding liquid accounts.

- **Non-Destructive Restoration:** Deleting the home event causes the retirement projection to snap immediately back to **$744,000**, confirming that milestones can be tested without corrupting underlying data.

Student Analysis & Reflection Questions

1. What happened to Quinn's liquid cash reserves in the exact year the home was purchased (4 years from now)? Why must a buyer maintain an emergency fund separate from their down payment?

2. After buying the home, Quinn's projected liquid retirement net worth dropped from $744,000 to $435,000. Does this mean buying a home made Quinn poorer? Explain how tangible home equity balances this trade-off on the household balance sheet.

3. When you deleted the home purchase event, what happened to the plan? Why is testing life choices in a simulation valuable before signing real legal contracts?

4. After purchasing the home in Year 4, Quinn’s liquid cash reserves dipped significantly. How did adding a 15% career promotion in Year 5 change Quinn's ability to maintain homeownership safely?

5. Economic Reasoning: Why is human capital (career skills, promotions, and earning power) an earner’s most effective long-term hedge against inflation and rising fixed housing costs?

Lab 5: Goal Setting & Execution (Emergency Reserves & Action Tracking)

- **Curriculum Alignment:** Unit 5 (Financial Goal Setting, Behavioral Task Tracking, and Risk Management)
- **The Goal:** Construct measurable multi-year savings targets, establish near-term execution action steps, and evaluate pure risk protection (term life insurance).
- **Scenario Profile: Quinn (Age 25)**, active dashboard.

Step-by-Step Instructions

1. **Navigate to the Operational Dashboard:**
   From the bottom navigation bar, tap the **Summary** tab.
2. **Inspect Context-Aware Suggestions:**
   Scroll down to the **Suggestions** section. Explain that the engine continuously evaluates the active plan to surface ranked, personalized recommendations. Note that suggestions contain both **Goals** and **Actions**:
   a. **Goals (Long-Term):** Measured in **years** (1 to 20+ years); progress is automatically calculated by the engine based on future projected balances at that target year.
   b. **Actions (Short-Term):** Measured in **days** (30 to 180+ days); these are operational tasks with manual progress tracking (0–100%) to drive day-to-day financial habits.
3. **Open the Goals Manager:**
   Scroll back to the top of the **Summary** tab and tap the **Goals** metric circle (or tap the Goals card in the dashboard).
4. **Add a Predefined Emergency Fund Goal:**
   Tap **Add Goal**. Switch the **Select a predefined goal** toggle to **ON**. Tap the dropdown menu and select **Build Emergency Fund**. Under **Years to Achieve**, select **5 Years**. In the **Set Target** field, enter **$20,000**. Tap **Save** .
5. **Analyze Dynamic Model Progress:**
   Observe the newly created goal card displaying an initial progress of **34%**. Explain to students that the engine is evaluating Quinn's projected liquid savings balance exactly five years into the future against the $20,000 target. To close that 66% gap, students can decide on choices for reducing discretionary living

expenses, bumping the payroll savings deduction higher with current income, or find other ways to create more income (freelance, etc).

6. **Create an Execution Action Step:**
   Tap the close button on the Goals sheet and tap **Actions** on the Summary dashboard. Tap **Add Action**. Enter the title **"Automate Monthly Transfer"**, set the timeframe to **30 Days**, and add the step detail **"Increase automated bank sweep from checking to savings"**. Tap **Save** , and demonstrate how students manually log progress as they complete real-world tasks.
7. **Plan for a life insurance policy:**
8. Tap **Plan** → scroll to **Important Documents** → tap **Life Insurance** → select **Quinn** → tap **Open Calculator**. Update fields to see how to estimate a policy value.

- **Curriculum Takeaway:** Illustrates pure risk management—showing students how to calculate term coverage needed to safeguard a household during peak debt and wealth-building years.

Where to Look & What to Observe

- **Dynamic Goal Progress:** The engine looks ahead to Year 5, comparing Quinn's projected liquid savings directly against the $20,000 target.
- **The Action Step:** The 30-day task represents immediate habit execution that students manually mark complete as progress occurs.
- **Risk Management:** The life insurance tool sizes term coverage based on income replacement and debt obligations without selling commercial policies.

Student Analysis & Reflection Questions

1. Quinn’s emergency fund goal shows an initial progress of 34% toward the $20,000 target. What specific steps could Quinn take to close the remaining 66% gap over the next five years?

2. What is the operational difference between a **Goal** (e.g., 5-year emergency fund) and an **Action Step** (e.g., 30-day transfer automation)? Why are both necessary to achieve financial health?

3. Why do young working adults with debt obligations need low-cost **Term Life Insurance** rather than expensive investment-bundled whole life policies?

Lab 6: Amortization in Action (Loan Payoff & Cash Flow Acceleration)

- **Curriculum Alignment:** Unit 3 (Installment Debt Amortization, Principal vs. APR, Prepayment Benefits, and Debt-Freedom Cash Reallocation)
- **The Goal:** Trace an installment loan schedule from start to zero, observe the real-time financial savings of adding extra monthly principal, and see how eliminating fixed debt early liberates cash flow for investing.
- **Scenario Profile: Quinn (Age 24)**, entered the workforce at graduating at age 22.

Step-by-Step Instructions

Part A: Establish Baseline Contractual Amortization

1. Tap **Settings > Reset** to start with a fresh simulation environment.
2. In onboarding, set Quinn's current age to **24**. enable **Student Loans** under liabilities (or add via **Accounts** → **Debts**).
3. In the Salary card, enter **$60,000** and Deduction of **2%** for **Savings account.** Tap **Next**
4. In **Add current asset and debt values**, tap **Savings account**, Combined balance = **$3,000**, adjust Rate of return = **4%**. Tap **Save** , tap **Student Loans,** then tap **Student loan with value of $0** (this is initial loan). Add a name if you want. Loan Amount = **$30,000**, Interest rate = **5%,** Start year = **2024**, and loan length of **10** years. Tap Save . Then Tap Cancel to return..then tap Next
5. On the Expenses screen, tap the **Education** category card. Confirm that the monthly loan payment is embedded directly into living expenses.
6. Complete onboarding and navigate to the **Summary** tab.

7. Locate the **Cash Flow** chart and tap and move your finger to see the pop up details for year 2034.

Part B: Test Accelerated Debt Paydown (The Extra Principal Experiment)

8. Tap the **Accounts tab** from the bottom navigation bar.

9. Scroll down to Debts and tap Quinn's Student loan to open its detail sheet.

10. Locate the Extra monthly payment field (directly below the monthly payment row).

11. Tap **Extra monthly payment**, enter $100, and observe the immediate real-time feedback:

    a. The Accelerated Payoff Callout Banner appears: The engine calculates that this extra payment saves $2,420 in total interest and eliminates 2 years and 9 months from the term.

    b. The Amortization Curve updates: The balance line plunges steeper toward zero, completing repayment in Year 7 (~7.2 years) instead of Year 10.

12. Tap **Save** , to apply the change and return to the Summary tab:

    a. Observe that during repayment years, annual spendable cash flow is $1,200 tighter$ (100/mo) as cash is diverted toward debt principal.

    b. Look at the Cash Flow chart: The upward "payoff step-up" shifts nearly three years earlier (from Age 32 down to Age 29), permanently liberating the entire $418/mo payment into liquid savings.

Where to Look & What to Observe

- **The Micro Impact (Inside the Debt Sheet):** Adding 100/*moextraprincipaldisplaystheexactdollarsavings*(2,420 in interest avoided) and months eliminated before committing to the plan.

- **The Macro Impact (Summary Cash Flow Chart):** The debt-freedom step-up shifts from Year 10 to Year 7, initiating Quinn's compounding wealth acceleration nearly three years earlier.

Student Analysis & Reflection Questions

1. When Quinn paid the contractual $318/mo, the loan required a full 10 years (120 months) to eliminate. By adding $100/mo in extra principal, how many years and months earlier was the loan paid off?

2. **Return on Investment:** Quinn contributed an extra 100/*monthforapproximately7.2years*($8,640 total extra cash). How much total interest charges did Quinn avoid paying to the lender?

3. **Trade-Off Analysis:** Paying an extra $100/mo required Quinn to sacrifice $1,200 of discretionary spending each year during early career years. Was this short-term budget sacrifice worth the outcome? Defend your position using debt-to-income (DTI) and cash-flow timing.

End of Student Lab Workbook

Turn in your completed reflection sheets to your instructor upon conclusion of the simulation exercises.