Financial Literacy with Mr. 401(k)
Spring Term 2026
April 27, 2026

Owning & Owing Stuff

Class 18: Equity and Net Worth – Understanding Wealth

Monday Money Matter$

Prediction markets are growing quickly. Prediction markets let people trade contracts based on whether future events, such as elections, sports results, cryptocurrency prices, or economic changes, will happen. Investment firm Bernstein predicts these markets could grow from about $51 billion in trading volume in 2025 to about $1 trillion a year by 2030. Even though regulators and states are debating how these markets should be controlled, Bernstein expects growth to continue as more companies and investors use them.

Source: CNBC; https://www.cnbc.com/2026/04/14/prediction-markets-will-grow-to-1-trillion-by-2030-bernstein-says.html; Reference Date: April 14, 2026.

Important Financial Terms Recap

How money flows:

Income

Making Money

Earned, passive, or portfolio

–

Expenses

Spending Money

Needs, wants, and taxes

=

Profit (or Loss)

What's left over after spending

Positive = profit | ***Negative = loss***

What you're worth:

Assets

The Stuff You **Own**

Cash, investments, property

–

Liabilities

The Stuff You **Owe**

Loans, debts, bills due

=

Equity (Net Worth)

Your true financial position

The goal: *grow this number over time*

What Is Equity?

Think of it like the net financial value of all your stuff

Equity

The net worth or value of what you own (**your assets**) after subtracting what you owe (**your liabilities**).

🚲 Your Ownership Stake

Equity represents how much of something you truly own. If you own a bike worth $500 and owe $200, your equity is $300.

📊 The Accounting Equation

Assets = Liabilities + Equity. Rearranged: Equity = Assets − Liabilities. This is the fundamental formula.

💰 Also Called Net Worth

Equity is often called "net worth." It's the total value of everything you own minus everything you owe.

💡 **Another Example:** You buy a video game console for $700 using $400 of your savings and a $300 loan from your parents. Asset = $700, Liability = $300, Equity = $400.

Anyone Can Build (or Destroy) Equity

What changes your equity? It's all about what happens to your assets and liabilities.

Building Equity

Pay Down Debt

Every loan payment reduces your liabilities and increases your equity.

Assets Appreciate

When things you own grow in value (like a house), your equity grows.

Save & Invest

Adding to your assets, without adding debt, builds equity over time.

Destroying Equity

Assets Depreciate

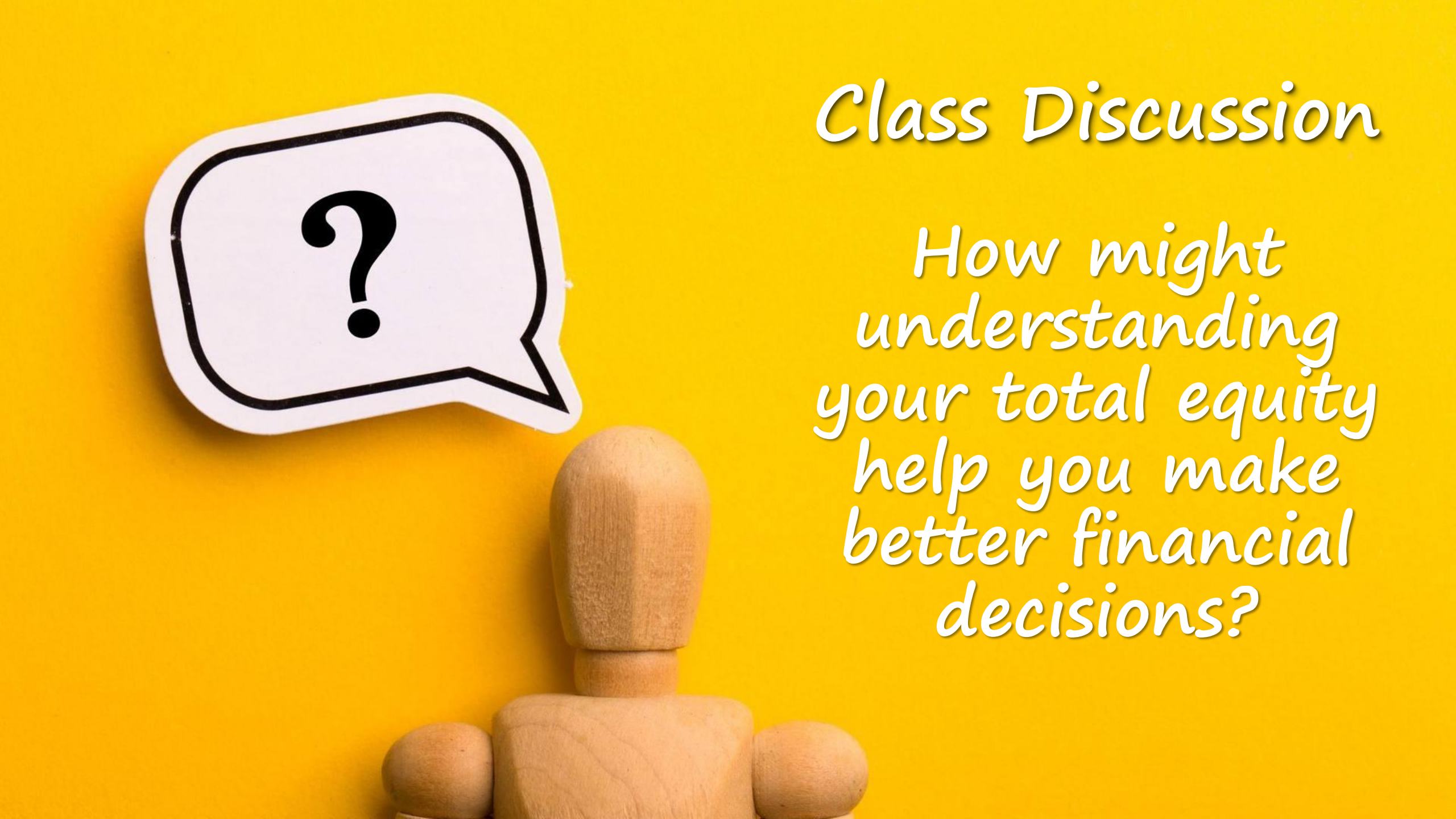
When things you own lose value (like a car), your equity shrinks.

Take on More Debt

Borrowing more money increases liabilities, which reduces equity.

Owe More Than You Own

When liabilities exceed assets, equity goes negative -- you're "underwater."



Class Discussion

How might understanding your total equity help you make better financial decisions?

Relationship Among Assets, Liabilities, and Equity

Assets

What you own

=

Liabilities

What you owe

+

Equity

What you're worth

This is the fundamental financial accounting equation.

The Fundamental Accounting Equation to Solve for Equity

Equity

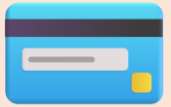
What you're worth

=

Assets

What you own

-



Liabilities

What you owe

Practical Application 🚲

A student borrowed some money to purchase a bicycle. The current value of the bicycle is $500. The student has been making payments on the borrowed amount and still owes $200.

1) **What is the asset?**

Practical Application 🚲

A student borrowed some money to purchase a bicycle. The current value of the bicycle is $500. The student has been making payments on the borrowed amount and still owes $200.

1) What is the asset?
2) **How much is the asset worth?**

Practical Application 🚲

A student borrowed some money to purchase a bicycle. The current value of the bicycle is $500. The student has been making payments on the borrowed amount and still owes $200.

1) What is the asset?
2) How much is the asset worth?
3) **What is the liability?**

Practical Application 🚲

A student borrowed some money to purchase a bicycle. The current value of the bicycle is $500. The student has been making payments on the borrowed amount and still owes $200.

1) What is the asset?
2) How much is the asset worth?
3) What is the liability?
4) **How much is owed on the liability?**

Practical Application 🚲

A student borrowed some money to purchase a bicycle. The current value of the bicycle is $500. The student has been making payments on the borrowed amount and still owes $200.

1) What is the asset?
2) How much is the asset worth?
3) What is the liability?
4) How much is owed on the liability?
5) **How much equity does the student have?**

Equity in a Car

$40k purchase price. $10k down payment. $30k loan at a 6% annual interest rate for 7 years = loan payment $438 / month

Equity

=

Asset

−

Liability

Equity in a Car

$40k purchase price. $10k down payment. $30k loan at a 6% annual interest rate for 7 years = loan payment $438 / month

Equity

=

Asset

$40,000

Car

−

Liability

$30,000

Auto Loan

Equity in a Car

$40k purchase price. $10k down payment. $30k loan at a 6% annual interest rate for 7 years = loan payment $438 / month

Equity

$10,000

$40,000 - $30,000 = $10,000

$10,000 / $40,000 = **25%**

=

Asset

$40,000

Car

−

Liability

$30,000

Auto Loan

Equity in the Car After 1 Year

Previously: $40k purchase price. $10k down payment. $30k loan at a 6% annual interest rate for 7 years = loan payment $438 / month

Equity

=

Asset

−

Liability

Day 1: Asset $40,000 − Liability $30,000 = Equity $10,000 | 25%

Presumes Asset Depreciation Rate Per: https://www.omnicalculator.com/finance/car-depreciation

Equity in the Car After 1 Year

Previously: $40k purchase price. $10k down payment. $30k loan at a 6% annual interest rate for 7 years = loan payment $438 / month

Equity

=

Asset

$31,992

Car

−

Liability

$26,444

Auto Loan

Day 1: Asset $40,000 − Liability $30,000 = Equity $10,000 | 25%

Presumes Asset Depreciation Rate Per: https://www.omnicalculator.com/finance/car-depreciation

Equity in the Car After 1 Year

Previously: $40k purchase price. $10k down payment. $30k loan at a 6% annual interest rate for 7 years = loan payment $438 / month

=

−

Equity

$5,548

$31,992 - $26,444 = $5,548

$5,548 / $31,992 ≈ **17%**

Asset

$31,992

Car

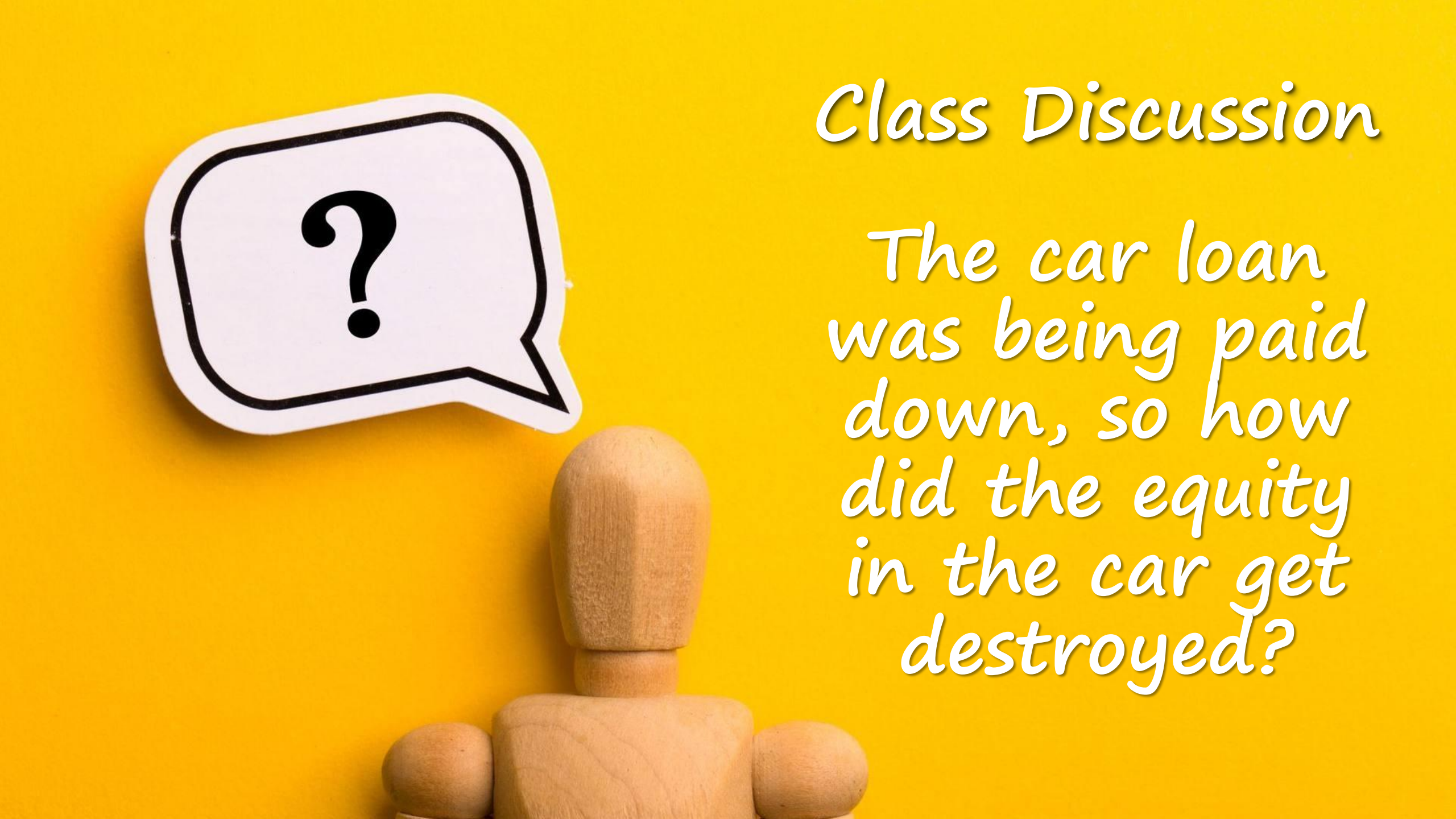
Liability

$26,444

Auto Loan

Day 1: Asset $40,000 − Liability $30,000 = Equity $10,000 | 25%

Presumes Asset Depreciation Rate Per: https://www.omnicalculator.com/finance/car-depreciation



Class Discussion

The car loan was being paid down, so how did the equity in the car get destroyed?

Visualizing Equity

How assets and liabilities affect your equity

Most Equity

Assets
$900
–
Liabilities
$300

Equity
$600

Some Equity

Assets
$500
–
Liabilities
$200

Equity
$300

Zero Equity

Assets
$600
–
Liabilities
$600

Equity
$0

Negative Equity

Assets
$700
–
Liabilities
$900

Equity
$-200

Deep Underwater

Assets
$100
–
Liabilities
$500

Equity
$-400

✓ **Equity is Positive** if Assets > Liabilities If Assets < Liabilities, **Equity is Negative** ✗

Equity in a House

$500k purchase price. $100k down payment. $400k loan at a 6% annual interest rate for 30 years = loan payment $2,398 / month

Equity

=

Asset

−

Liability

Equity in a House

$500k purchase price. $100k down payment. $400k loan at a 6% annual interest rate for 30 years = loan payment $2,398 / month

Equity

=

Asset

$500,000

House

−

Liability

$400,000

Mortgage Loan

Equity in a House

$500k purchase price. $100k down payment. $400k loan at a 6% annual interest rate for 30 years = loan payment $2,398 / month

Equity

$100,000

$500,000 - $400,000 = $100,000

$100,000 / $500,000 = **20%**

=

Asset

$500,000

House

−

Liability

$400,000

Mortgage Loan

Equity in the House After 2 Years

Previously: $500k purchase price. $100k down payment. $400k loan at a 6% annual interest rate for 30 years = loan payment $2,398 / month

Equity

=

Asset

−

Liability

At Purchase: Asset $500,000 − Liability $400,000 = Equity $100,000 | 20%

Presumes Asset Appreciation Rate of 3% Annually

Equity in the House After 2 Years

Previously: $500k purchase price. $100k down payment. $400k loan at a 6% annual interest rate for 30 years = loan payment $2,398 / month

Equity

=

Asset

$530,450

House

−

Liability

$389,873

Mortgage Loan

At Purchase: Asset $500,000 − Liability $400,000 = Equity $100,000 | 20%

Presumes Asset Appreciation Rate of 3% Annually

Equity in the House After 2 Years

Previously: $500k purchase price. $100k down payment. $400k loan at a 6% annual interest rate for 30 years = loan payment $2,398 / month

Equity

$140,577

$530,450 - $389,873 = $140,577

$140,577 / $530,450 ≈ **27%**

=

Asset

$530,450

House

−

Liability

$389,873

Mortgage Loan

At Purchase: Asset $500,000 − Liability $400,000 = Equity $100,000 | 20%

Presumes Asset Appreciation Rate of 3% Annually

Equity in the House After 2 Years

Previously: $500k purchase price. $100k down payment. $400k loan at a 6% annual interest rate for 30 years = loan payment $2,398 / month

=

Equity

$140,577

$530,450 - $389,873 = $140,577

$140,577 / $530,450 ≈ **27%**

Asset gained value $30,450 (appreciation).
Liability decreased $10,127 (mortgage paydown).

That's why equity increased:

$100,000 → $140,577

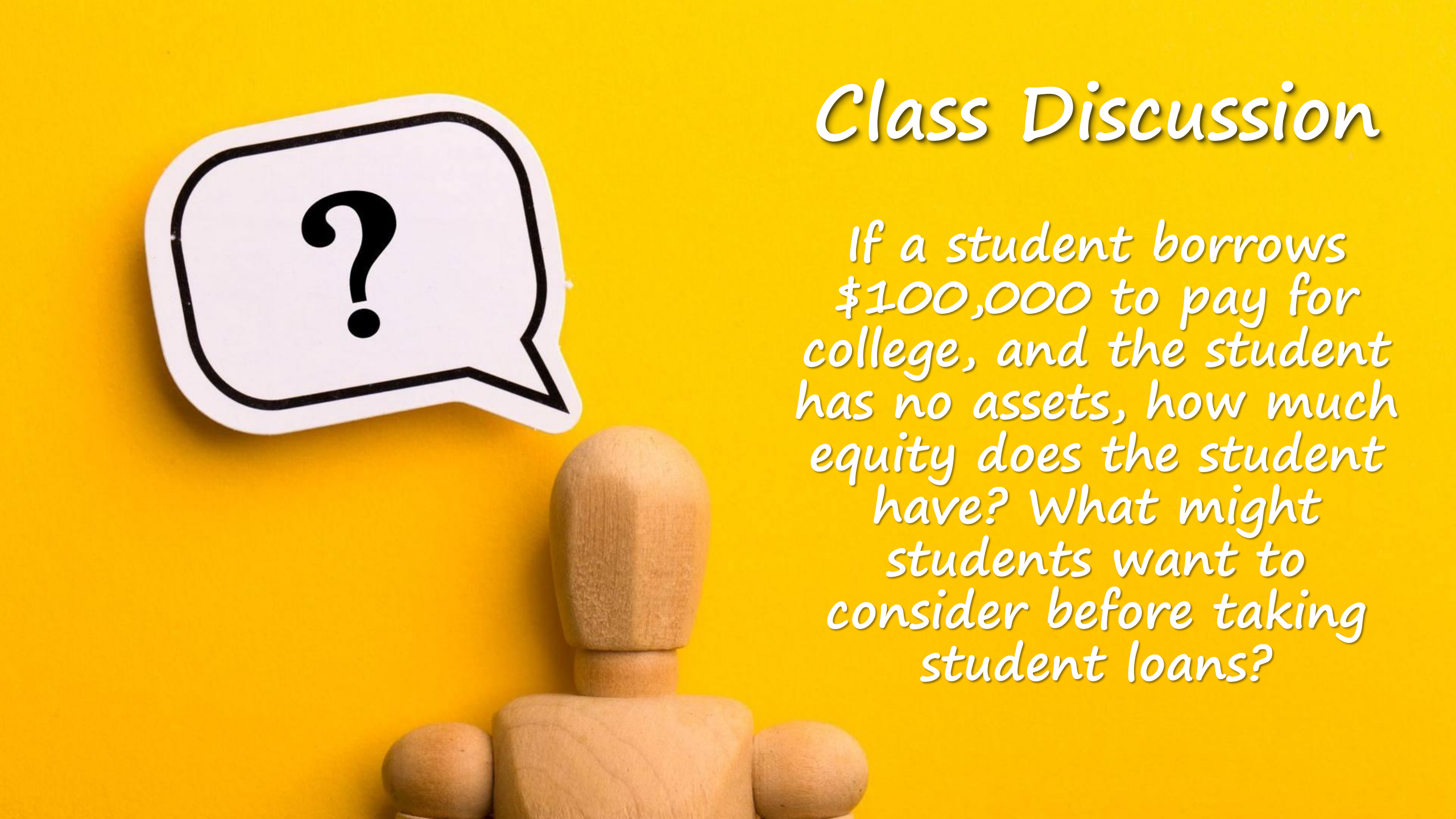
20% → 27%

House

Mortgage Loan

At Purchase: Asset $500,000 − Liability $400,000 = Equity $100,000 | 20%

Presumes Asset Appreciation Rate of 3% Annually



Class Discussion

If a student borrows $100,000 to pay for college, and the student has no assets, how much equity does the student have? What might students want to consider before taking student loans?

Money Mavericks

Objective: Work to correctly calculate the **equity** for each scenario using the equation:

$$\text{Equity} = \text{Assets} - \text{Liabilities}$$

Alpha	Beta	Gamma
Delta	Epsilon	Zeta

Practical Application

Within your Money Mavericks Workgroup, calculate the **Equity** for your assigned scenario using the equation: **Equity = Assets – Liabilities**

Alpha	Beta	Gamma	Delta	Epsilon	Zeta
Used Car Purchase	**Laptop on a Payment Plan**	**Lemonade Stand**	**Skateboard Shop Idea**	**Phone Upgrade**	**Gaming PC Setup**
Asset: Car worth $8,000	**Asset:** Laptop worth $1,200	**Asset:** Supplies: $300	**Asset:** Inventory worth $2,000	**Asset:** Phone worth $900	**Asset:** PC setup worth $1,500
Liability: Car loan of $5,000	**Liability:** Still owe $400	**Liability:** Borrowed $150 to start	**Liability:** Startup loan of $1,500	**Liability:** Payment plan balance: $600	**Liability:** Owe parents $800
Equity = ?	**Equity = ?**	**Equity = ?**	**Equity = ?**	**Equity = ?**	**Equity = ?**

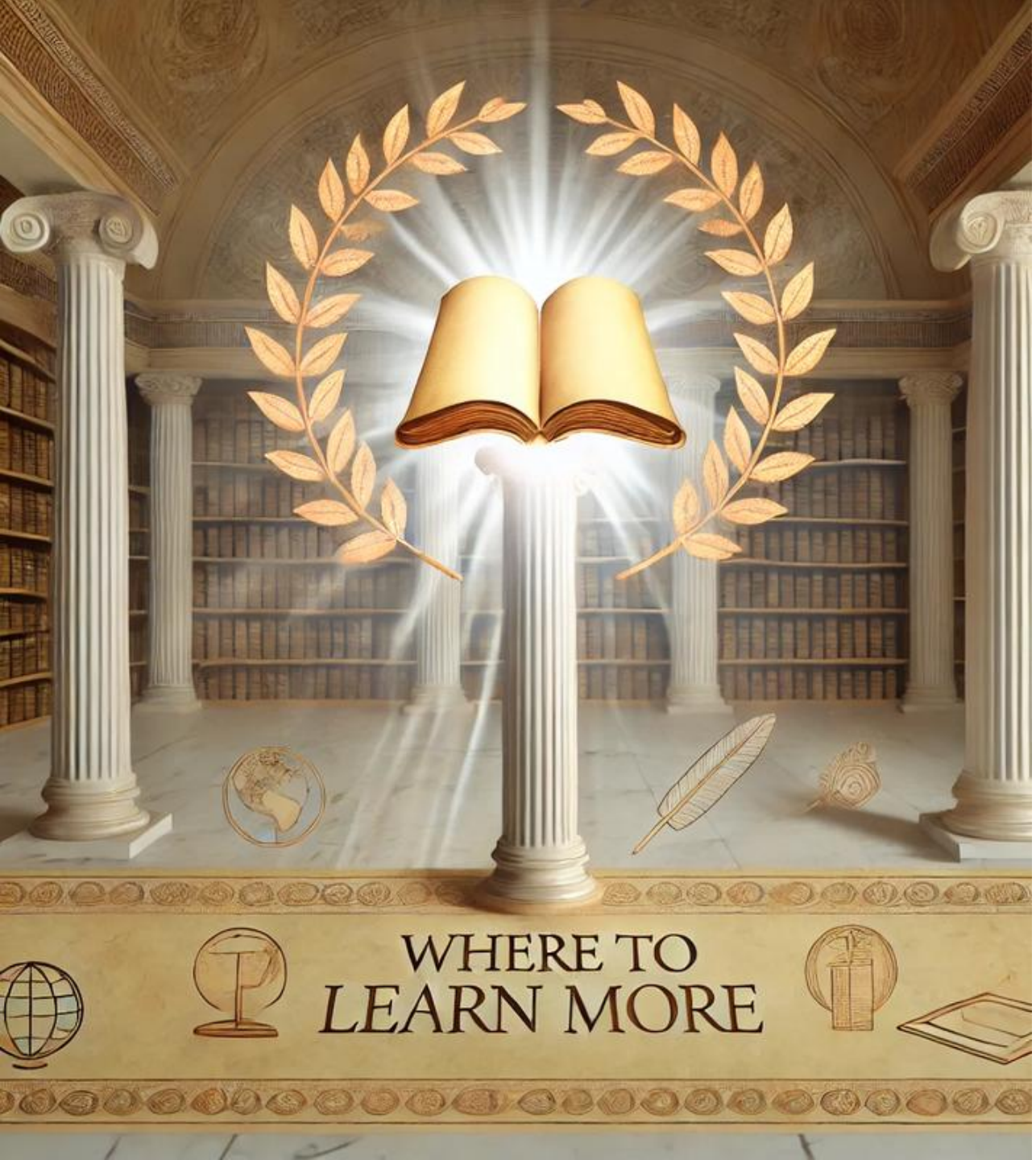
Practical Application Answers

Within your Money Mavericks Workgroup, calculate the **Equity** for your assigned scenario using the equation: **Equity = Assets – Liabilities**

Alpha	Beta	Gamma	Delta	Epsilon	Zeta
Used Car Purchase	**Laptop on a Payment Plan**	**Lemonade Stand**	**Skateboard Shop Idea**	**Phone Upgrade**	**Gaming PC Setup**
Asset **$8,000** – Liability **$5,000**	Asset **$1,200** – Liability **$400**	Asset **$300** – Liability **$150**	Asset **$2,000** – Liability **$1,500**	Asset **$900** – Liability **$600**	Asset **$1,500** – Liability **$800**
Equity **$3,000**	Equity **$800**	Equity **$150**	Equity **$500**	Equity **$300**	Equity **$700**
38% equity	**67% equity**	**50% equity**	**25% equity**	**33% equity**	**47% equity**

Three Key Takeaways

1. Equity represents assets' net worth after subtracting liabilities.
2. When assets > liabilities, equity is positive; when assets < liabilities, equity is negative.
3. Equity can increase through asset appreciation; Equity can decrease through asset depreciation.



Where to Learn More

- Finance For Teens & Young Adults: Achieve Financial Literacy, Don't Live Paycheck to Paycheck, Understand Your Relationship With Money, Look Forward To Your Financial Future & Make Money Work For You! by Harlen Pierce
- The Accounting Game: Learn the Basics of Financial Accounting - As Easy as Running a Lemonade Stand (Basics for Entrepreneurs and Small Business Owners) by Darrell Mullis (Author), Judith Orloff (Author)
- Video: What is Equity by The Organic Chemistry Tutor

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