Using Graphing Calculators in Your Financial Literacy Program

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Hello! I'm Kathryn

👍 I love knitting and 👎 hate olives.

I'm a Senior Curriculum Designer at NGPF, and you can find me at kathryn@ngpf.org

Today's Agenda

AGENDA

- Intro to NGPF & Mission 2030
- Overview of NGPF Courses
- NGPF Math Website
- Activity Exploration
- Wrap Up

Introduction to ngpf

NEXT GEN PERSONAL FINANCE

MISSION: 2030

By 2030, ALL students will take a one-semester personal finance course before they graduate from high school.

Access to personal finance courses in the U.S.

23
Guarantee States

8
Fully Implemented*

15
Implementation in Progress**

States passed policies in 2023

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NGPF Curriculum & Courses

HIGH SCHOOL PERSONAL FINANCE COURSE

Flagship course!

SEMESTER COURSE

18 weeks of daily instruction to fit a traditional semester

- Aligned to national standards
- Activities and curated resources built into all lessons
- Activities and exams are translated into Spanish
- Diagnostic, Unit, and Final exams
- Nearpod lessons

ALSO AVAILABLE

FINANCIAL ALGEBRA

Perfect for a semester-long elective or full-year math alternative

MIDDLE SCHOOL

Built to deliver personal finance to your middle school students

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The Financial Algebra Course

Why We Built This Course

NGPF's Financial Algebra Course

- Core Algebra I concepts with extensions beyond
- Bridges math & personal finance
- Promotes engagement with dynamic resources
- Answers: "When will I use this?"

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Course Overview

Why teach real-world personal finance skills in Algebra?

Currently, just 1 in 4 U.S. high schoolers takes personal finance, yet nearly every student takes Algebra. Cross-curricular instruction - delivered by confident Algebra teachers with world-class curriculum - has the potential to impact the future of the *entire* next generation of young people, not just the lucky few.

COURSE OBJECTIVE

The NGPF Financial Algebra course is for **high school math teachers** who are looking to weave *real-world* personal finance applications with math standards alignment and deep algebraic rigor.

NGPF's Financial Algebra Course

The NGPF Financial Algebra Course organizes the many financial applications of traditional Algebra skills into a cohesive narrative: **one semester in 10 units.**

PERSONAL FINANCE UNIT	CORE MATH COMPETENCY
1. Taxes	Fundamentals of Algebra
2. Checking	Linear Equations
3. Saving	Systems of Equations
4. Budgeting	Systems of Inequalities
5. Intro to Investing	Exponential Functions
6. Investing Strategies	Exponential Functions
7. Types of Credit	Modeling Functions
8. Managing Credit	Fundamentals of Statistics
9. Paying for College	Statistical Analysis
10. Insurance	Probability

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Two Different Lesson Types

PERSONAL FINANCE

- Intro Activity
- Learn It (finance content)
- Math Connection
- Exit Ticket

Unit 10, Lesson 5:
Auto Insurance

MATH

- Intro Activity
- Learn It (math skills)
- Practice It
- Application

Unit 10, Lesson 2:
Intro to Probability

Explore NGPF Math

The Financial Algebra Page

The Financial Algebra Course includes 10 units, each blending one math topic and one personal finance topic.

Find all the course materials at *www.ngpf.org/math/financial-algebra/*

Individual Math Activities

100+ real-world math activities that are filterable by topic and standard.

Find all NGPF Math activities at *www.ngpf.org/math/activities*

Activity Walkthrough

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financialalgebra

2.5 Graphing Linear Equations

Application

UNIT: CHECKING & LINEAR EQUATIONS

Name:

APPLICATION: Graphing Wages and Linear Equations

Level 1

TEACHER TIP: Print one copy of these wage cards for each group of 3 students for the **Level 1** activity. Cut along each row and fold in half so that one side shows "Team Member" and the other side shows "Compensation Package."

Comparing Compensation

Congratulations on being hired! Please flip over your wage card to see how much you'll be making at your new job. On your first day, you're discussing your compensation with the other new hires in your group.

Part 1: Equations

1. **Write an equation that represents each team member's compensation. Your equation should represent a relationship between hours worked (x) and total pay (y). Please put the equation for each team member in the boxes below.**

Team Member 1	Team Member 2	Team Member 3

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Activity Walkthrough

NEXT GEN PERSONAL FINANCE

NGPF Math Collection
Budgeting

MATH: Depreciation of Car Value

In life, you may not always see things losing value at a steady rate. Often things with a limited lifespan, like many electronics and cars, will lose more value in the first few years and less value as time goes on. This concept is called depreciation and it can be modeled using exponential decay.

Math Topics
• Exponential Functions • Exponential Decay

Personal Finance Topics
• Depreciation • Inflation

EdPuzzle Video

Part I: Exponential Decay Example

Example 1: A school purchases equipment to screen print their own athletic uniforms. The equipment initially costs $8,000 and will depreciate at 8% annually. They are told this type of equipment has a lifespan of about 10 years. How much will the screen printing equipment be worth in 10 years when the school anticipates needing to replace the equipment?

Answer Keys & Assessments

Free Teacher Account

Answer Keys

SIGNED IN

NGPF Professional Development

NGPF On-Demand

1-hour self-paced sessions. 45+ modules on a range of personal finance topics:

- **FAFSA Basics**
- **Popular Budgeting Strategies**
- **Beginner Series: Diving into NGPF's Math Resources**

Certification Courses

9 hours of LIVE instruction followed by a 1-hour exam on various topics:

- **Credit**
- **Investing**
- **Insurance**
- **Banking & Budgeting**
- **Paying for College**

Virtual PD

3-5 LIVE collaborative sessions each week!

- **Ideas for the First Day of School**
- **Activity Spotlight: The Bean Game**
- **Speaker Series**

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NGPF info

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Closed Group: FinLit Fanatics!

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Questions?