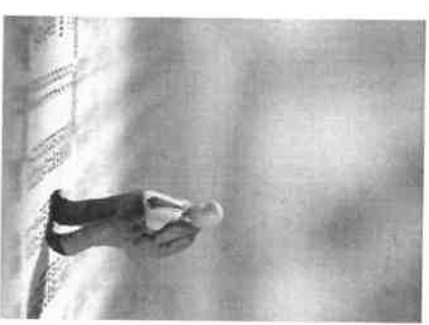


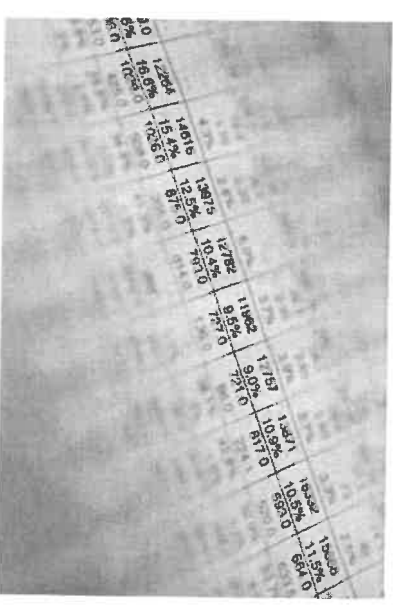
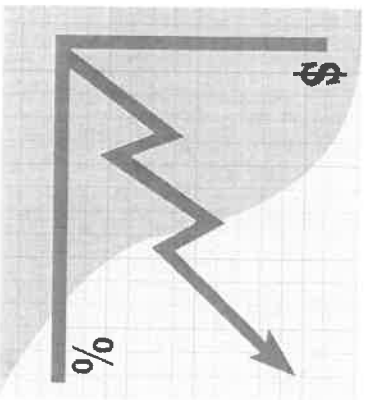
# The Stock Market Challenge

- 4 week project
- Goal: Introduce math in a real world context using real world data.
- First 2 weeks: Coke vs. Pepsi.
- Second 2 weeks: Simulated the purchase and sale of stocks from other companies.



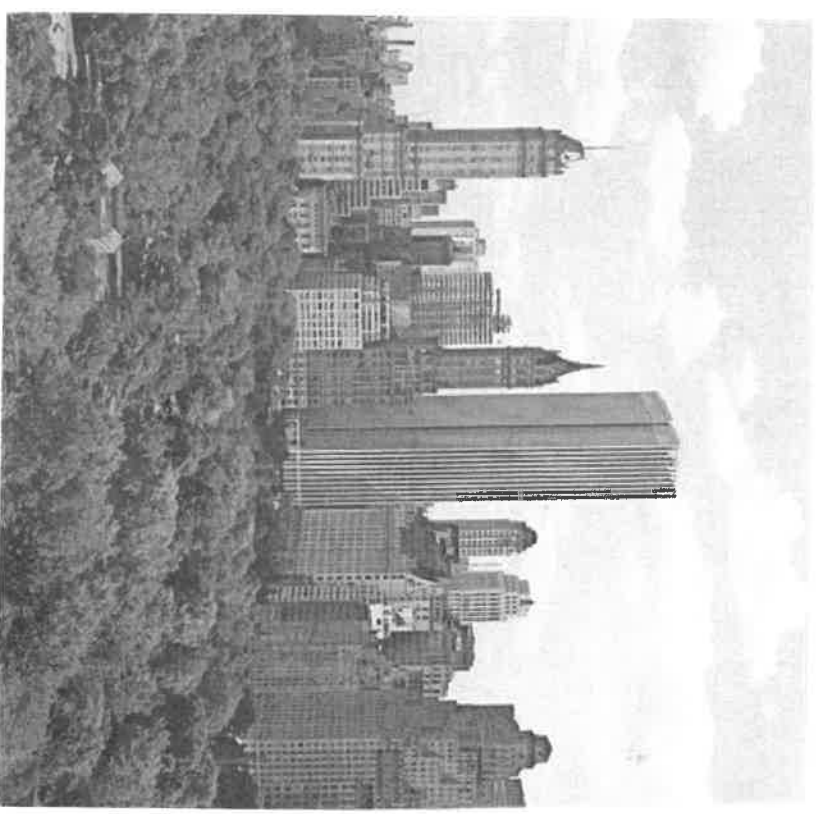
# The Stock Market

# What is it?



# Introduction

Why do people start businesses?





# Profit



When you make money in business, it is called a profit.

Mathematically:  $\text{Profit} = \text{Revenue} - \text{Cost}$

For example: If you buy an iPod for \$250 and sell it for \$300, you made a profit of ...

# Loss

There is also a risk that you will lose money!



# How do you raise money to start a new business?

One way to raise money is to borrow money from a bank. This money must be paid back.



# Stocks

You can also sell ownership in the company. This means you have other people give you money and they have a share in the profits (and losses) of the company. These ownership shares are called **shares of stocks**.



# Dividends

When a company makes a profit, they typically pay the owners of stock a dividend.

1138

idbiz Corporation  
2872 Cournea St  
Fresno, CA 93703

Chibank

DATE  
02/06/2018


Reference

DOLLARS

THREE THOUSAND THREE HUNDRED AND 00/100

\$ 3,300.00

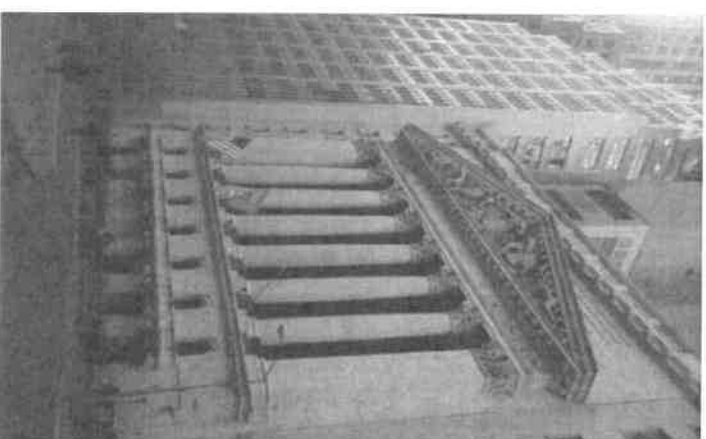
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# The Stock Market

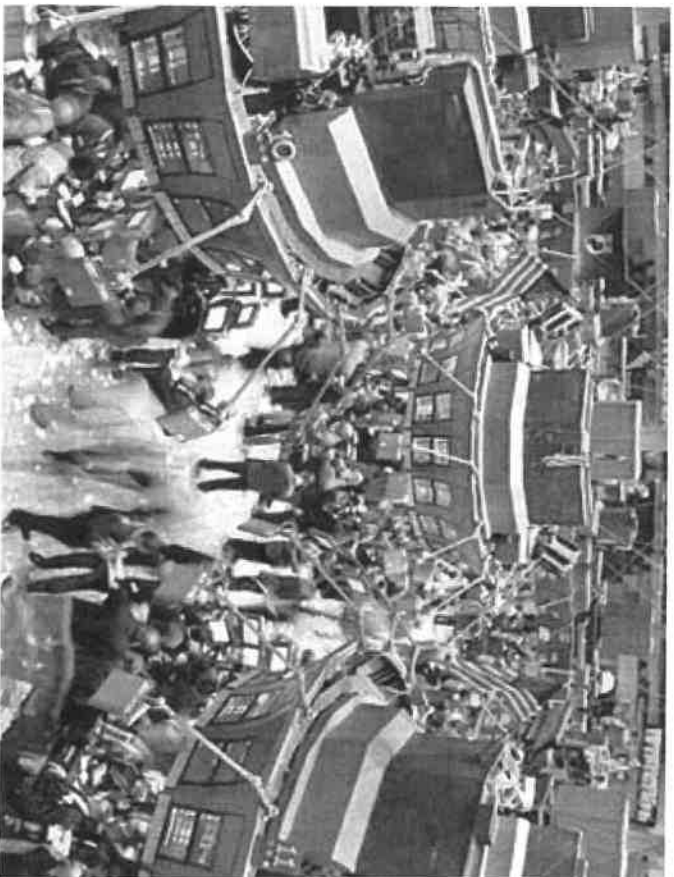
If you own shares of a company, you can sell them to other people in the stock market.



The New York Stock Exchange (NYSE) is one of these markets.

# Stock Prices

When a company is doing well, more people want to buy the stock and its price in the market rises.



When a company is not doing well, more people want to sell the stock and its price falls.

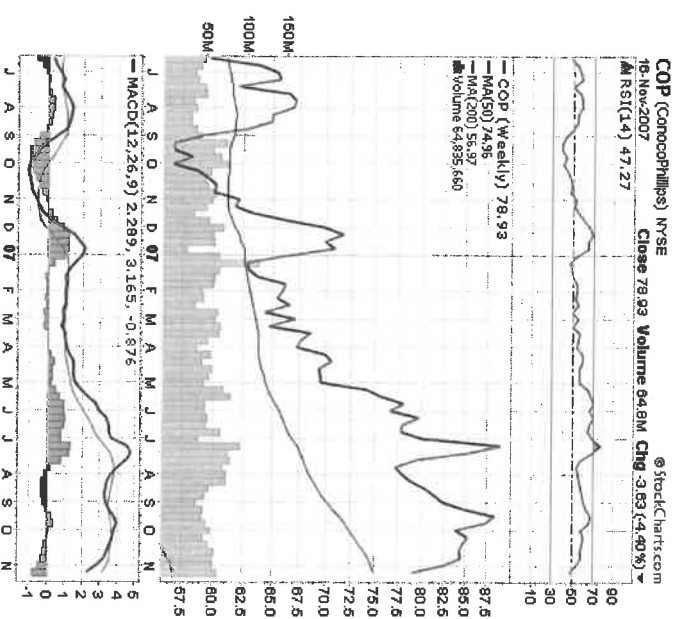
# Recap

Businesspeople raise money by selling stock (ownership claims) in their company. People who buy these shares can sell them on the market at a higher price and make money.

Stock Market in Plain English

# The Pepsi/Coke Challenge

This week, each day you will look up and graph the stock prices for two companies: Pepsi and Coke.



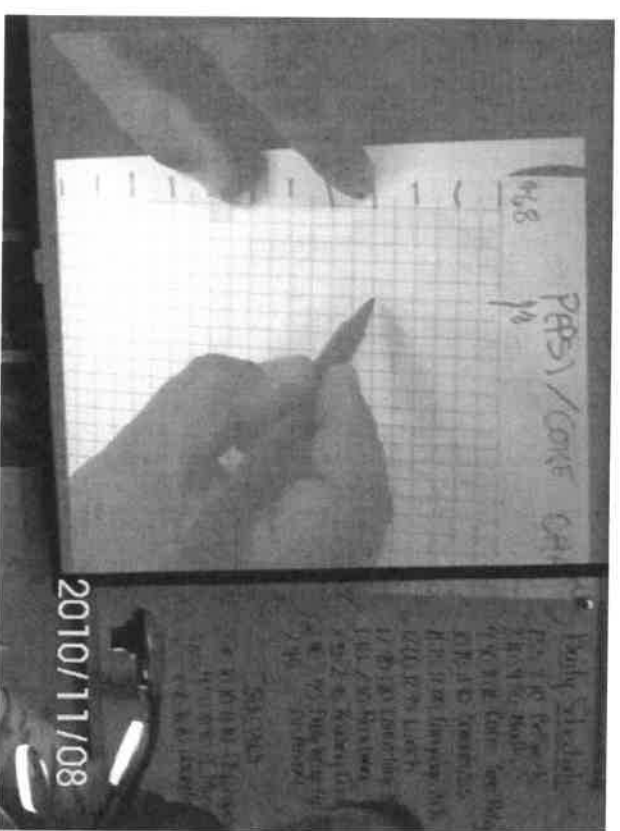
# Another Video

- This video does a nice job tying math and the stock market together.

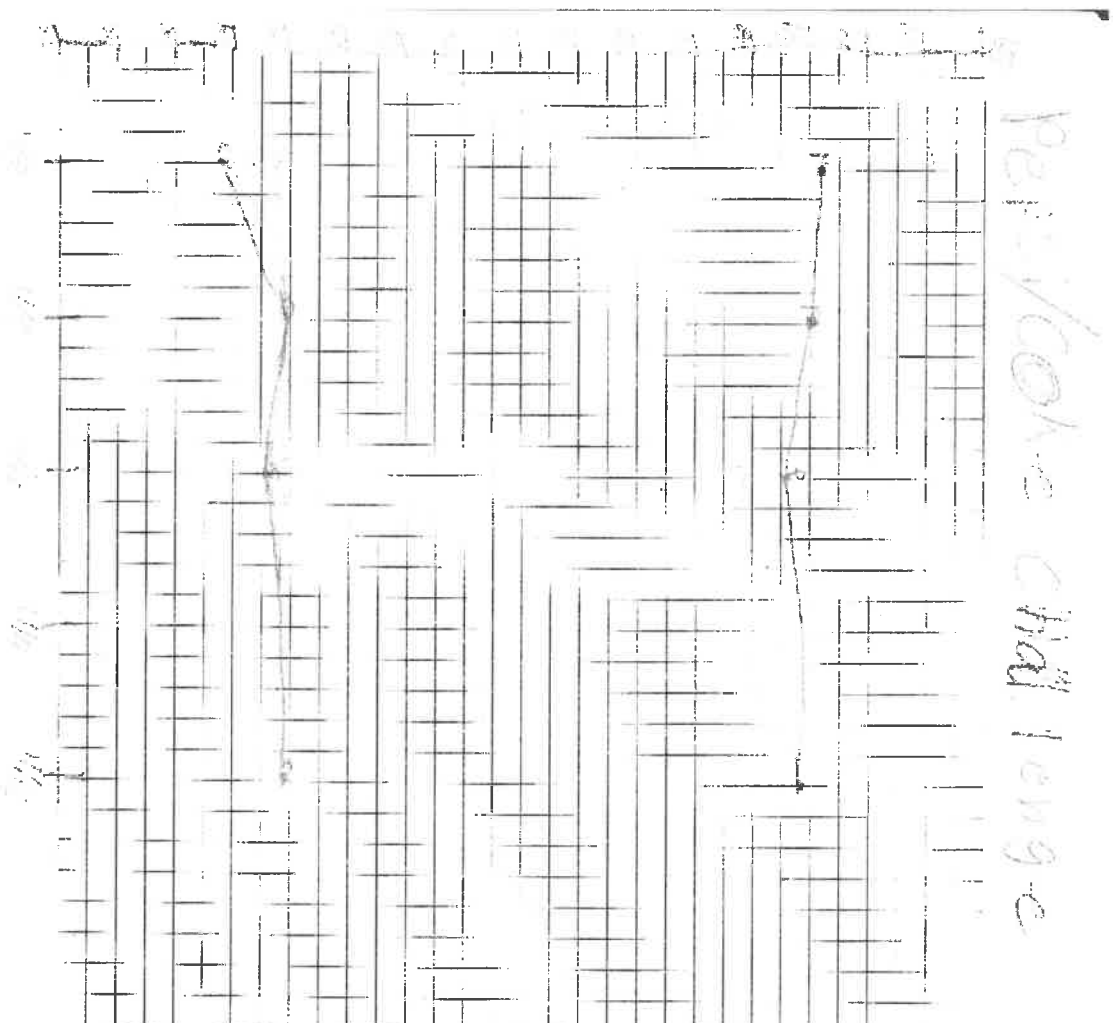
Example\_3\_\_Fractions\_\_Decimals\_\_and\_\_Percents\_\_Stocks\_and\_\_Statues.asf

# Pepsi/Coke Challenge

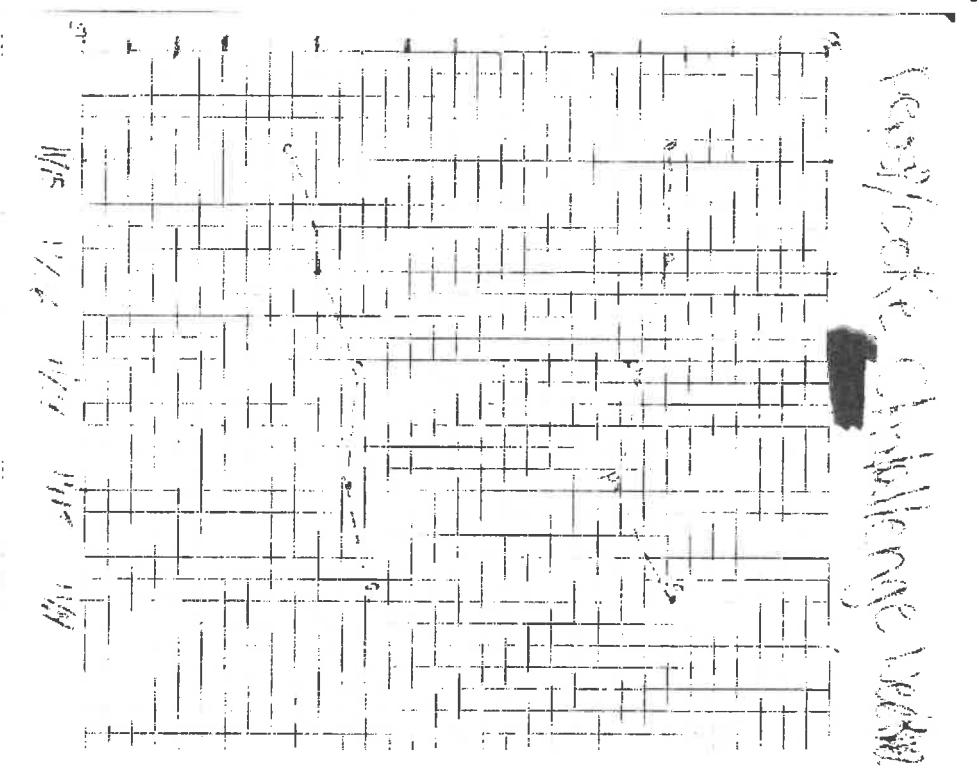
- Each day: Looked up price of Pepsi stock and Coke stock and plotted on a graph.
- This lasted 2 weeks.
- Created line graphs.



# Week 1 Sample



# Week 2 Sample





# Purchase and Sale Simulation

- Students chose from a list of 8 stocks for familiar companies.
- In computer lab: Google Finance (<http://www.google.com/finance>)
- Wrote down price on a Friday, wrote down price on following Tuesday.
- Who made the most money?
- Some students looked at news articles!

## **Choose Your Own Stock!**

Now your group will choose a stock to track. Using Google Finance ([www.google.com/finance](http://www.google.com/finance)), choose one of the following stocks to track. We will see which group makes the most money on a purchase and later sale of 100 shares of your chosen company.

1. The Walt Disney Company. NYSE Ticker: DIS
2. Six Flags Entertainment Corp. NYSE Ticker: SIX
3. McDonald's Corporation. NYSE Ticker: MCD
4. General Motors Co. NYSE Ticker: GM
5. Wal-Mart Stores, Inc. NYSE Ticker: WMT
6. Domino's Pizza, Inc. NYSE Ticker: DPZ
7. Kellogg Company. NYSE Ticker: K
8. Southwest Airlines Co. NYSE Ticker: LUV

As you track your stock, keep the daily price on one piece of paper and plot your graph on a piece of graph paper.

**How much money will YOU make??**

# Who Made the Most Money?

Go to [www.google.com/finance](http://www.google.com/finance) and  
find your stock.

- Click on and highlight the address in the address bar.
- Type in [www.google.com/finance](http://www.google.com/finance)
- In the search bar at the top, type in your stock ticker.

# How Much Did You Make?

- Write down the current price for your stock and find the price of your stock from Friday.
  - Subtract the lower price from the higher price. If today's price is lower, this is a **loss**. If today's price is higher, this is a **gain**.
  - If you want, figure out what you made or lost if you bought 100 or 1000 shares!
  - If you have time, look at the news articles to see what happened that may have effected the price.
- Write a brief paragraph describing why you think you gained or lost money.

# Sample 1

Kellogg Company: k  
in Tuesday  
48.98  
Friday  
48.98  
Last CO. 17

# Sample 2

McDonald's

79.34

579.31

576.87

79.44

79.44

- 644

76.87

6.38

We are currently for McDonald's and for  
576.97 and we have 576.97 from  
79.44

# Sample 3

DEMONS Pizza Deliveryman  
ATTACKED IN PHILADELPHIA  
POLICE SAY AROUND 80' CLEAR  
TWO PEOPLE WERE IN S. BUCK  
HOODS TURNED THE CAR BENT  
EMPLOYEES STAYED SETTING



# Reflections



- The real-world application along with the use of real world data was a great motivator for students!
- Some students who had been previously unengaged became enthusiastic. The context led to student “buy-in”.
- When brought back to first principles and properly motivated, young students can understand fairly complicated concepts.
- This type of activity is very difficult to fit within every-day teaching constraints.

# Implementation Suggestions

- The main challenge is to work within constraints.
- Computer special – a potential time to do work on such a project.
- Another possibility: Introduce at the beginning of year, use as a source of examples throughout the year.
- Reteaching for specific math topics.
- Vertical Integration

# Standards

This project addressed a number of standards simultaneously, for example:

1. S1C1PO3: Locate Integers on No. Line
2. S1C1PO4: Compare/Order Decimals
3. S1C1PO6: +/- No.'s in Context
4. S1C2PO1: Subtract Decimals
5. S2C1PO1,2: Line Graphs
6. S3C4PO1: Describe Change: Inc./Dec.

# Our Questions for You

- In most schools today, teachers have constraints. Curriculum calendars and scripted curricula do not leave students with the opportunity to have in depth exploration time. Are we producing tomorrow's problem solvers?
- What kinds of ideas do you have that could turn into a possible project that relates to real world problems, yet that have fidelity to school districts?

# Thanks! Questions for Us?

