

# Comparing stock investments

Students learn how calculating capital gains and capital losses can help them evaluate stock investments.

## Learning goals

### Big idea

To measure a stock's past performance, you'll need to calculate that investment's gains and losses.

### Essential questions

- How do you calculate a capital gain or capital loss?
- How can you use percentages to evaluate a stock's past performance?

### Objectives


- Calculate capital gains and capital losses for stock transactions in terms of dollars and percentages
- Understand how these calculations can help evaluate a stock's past performance

### What students will do

- Calculate capital gains and capital losses in terms of dollars and percentages for specific stock transactions.
- Determine which stock transaction had the greatest capital gain in terms of dollars.
- Determine which stock transaction had the greatest gain in terms of percentages.

#### KEY INFORMATION

Building block:

 Financial knowledge and decision-making skills

Grade level: High school (9-12)

Age range: 13-19

Topic: Save and invest (Investing)

School subject: CTE (Career and technical education), Math, Science

Teaching strategy: Cooperative learning, Simulation

Bloom's Taxonomy level: Apply

Activity duration: 45-60 minutes

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#### STANDARDS

Council for Economic Education  
Standard V. Financial investing

Jump\$tart Coalition  
Investing - Standard 2

## Preparing for this activity

- Print copies of all student materials, or prepare for students to access them electronically.
- Students should have access to calculators.
- While it's not necessary, completing the "Investigating investing" activity before this one will make it more meaningful.

### What you'll need

#### THIS TEACHER GUIDE

- **Comparing stock investments (guide)**  
[cfpb\\_building\\_block\\_activities\\_comparing-stock-investments\\_guide.pdf](#)

#### STUDENT MATERIALS

- **Comparing stock investments (worksheet)**  
[cfpb\\_building\\_block\\_activities\\_comparing-stock-investments\\_worksheet.pdf](#)
- **Calculators**

## Exploring key financial concepts

Stocks are a type of investment that gives people a share of ownership in a company. According to the U.S. Securities and Exchange Commission, stocks offer investors the greatest potential for growth (capital appreciation) over the long haul. Investors willing to stick with stocks over long periods of time, say 15 years, generally have been rewarded with strong, positive returns.

But stock prices move down as well as up. There's no guarantee that the company whose stock you hold will grow and do well, so you can lose the money you invest in stocks.

When you sell a stock for more than you paid for it, that's called a capital gain. When you sell a stock for less than you paid for it, that's a capital loss. You can calculate your gains or losses in terms of dollar amounts, but it also helps to calculate them as percentages. A \$10 stock sold for \$15 will have a lower capital gain in terms of dollars than a \$100 stock sold for \$150 – \$5 versus \$50. But when compared as percentages, both stocks had a capital gain of 50 percent.

#### TIP

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Because financial products, terms, and laws change, students should be encouraged to always look for the most up-to-date information.

Calculating capital gains or losses can help you track your stock's performance and can be an important tool for managing investments.

### Note

It's important to emphasize that all investments, even savings products, have some level of risk. These risks include how readily investors can get their money when they need it; how fast their money will grow; whether they can lose some, all, or in some cases, more than their initial investment; and how inflation, taxes, market conditions, and other external factors may affect the value of their investment.

## Teaching this activity

### Whole-class introduction

- Tell students that they'll practice calculating capital gains and capital losses in dollar amounts and percentages for four friends on their worksheet.
- Distribute the worksheets and calculators to the students.
- Be sure students understand key vocabulary:
  - **Annual return:** The profit or loss on an investment over a one-year period
  - **Capital gain:** The profit that comes from selling an investment for more than you paid for it.
  - **Capital loss:** The loss that comes from selling an investment for less than you paid for it.
  - **Invest:** To commit money to earn a financial return; the strategic purchase or sale of assets to produce income or capital gains.
  - **Investment:** Something you spend your money on that you expect will earn a financial return.
  - **Risk:** Exposure to danger, harm, or loss.
  - **Share:** A unit of ownership, often in a company's stock or in a mutual fund.
  - **Stock:** A type of investment that gives people a share of ownership in a company.
- Ask students to share their thoughts on why someone would want to calculate their capital gains or capital losses in terms of dollars and percentages.

### TIP

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Visit CFPB's financial education glossary at [consumerfinance.gov/financial-education-glossary/](https://consumerfinance.gov/financial-education-glossary/).

- You may want to use the example in the “Exploring key financial concepts” section so students can see how using only the dollar amount doesn’t always give a clear comparison between stocks of different value.

## Individual or group work

- Students can work individually or in pairs.
- In Part 1 of the worksheet, students will calculate capital gains or losses, in dollar amounts, for the four friends in the scenario.
  - They’ll determine which friend had the biggest capital gain in terms of dollar amounts.
- In Part 2, they’ll use the formula to calculate each friend’s capital gain or loss in percentages.
  - Students will then determine which friend had the biggest capital gain in terms of percentages.
- Students will answer the reflection question.

## Wrap-up

- Bring students together and ask for volunteers to share their answers.
- Address any questions that arise.

## Suggested next steps

Consider searching for other [CFPB activities](#) that address the topic of investing.

## Measuring student learning

Students’ responses can give you a sense of their understanding of capital gains and capital losses and how to calculate them in terms of dollars and percentages.

**Keep in mind that students’ answers may vary.** The important thing is for students to have reasonable justification for their answers.

This answer guide provides possible answers for the “Comparing stock investments” worksheet.

## Answer guide

### Part 1. Capital gains and losses in dollar amounts

This cell is empty	Total purchase price	Total sale price	Capital gain or capital loss?	How much?
Taylor bought 10 shares of <i>Computer Maker Inc.</i> stock for \$36.91 each. He sold them for \$69.69 each.	\$369.10	\$696.90	Capital gain	\$327.80
Jon bought five shares of <i>Chemical Producer Co.</i> stock for \$79.81 each. He sold them for \$101.29 each.	\$399.05	\$506.45	Capital gain	\$107.40
Celise bought two shares of <i>Pharmaceuticals Corp.</i> stock for \$188.10 each. She sold them for \$352.00 each.	\$376.20	\$704.00	Capital gain	\$327.80
Abbi bought eight shares of <i>Biotechnology Co.</i> stock for \$45.51 each. She sold them for \$43.33 each.	\$364.08	\$346.64	Capital loss	-\$17.44

Taylor and Celise had the biggest gain in terms of dollar amount, both with a capital gain of \$327.80.

### Part 2. Capital gains and losses in percentages

This cell is empty	Calculation	Percentage gain or loss
Taylor	$(696.90 - 369.10) \div 369.10 = .888 \times 100$	88.8% gain
Jon	$(506.45 - 399.05) \div 399.05 = .269 \times 100$	26.9% gain
Celise	$(704.00 - 376.20) \div 376.20 = .871 \times 100$	87.1% gain
Abbi	$(346.64 - 364.08) \div 364.08 = -.047 \times 100$	4.7% loss

Taylor had the biggest gain in terms of percentage.