

## INVESTigating Ways to Integrate Mathematics and Financial Literacy

### Debunking the Deception of Double Discounts

Number + Spending and Saving



What is the approximate total discount from this double discount example?

Why do stores say “An extra 20% off of 40% off” rather than give a single discount?

### Which Car for You?

Algebra + Financial Decision Making

Amount of miles driven (x)	Equation	Cost to Own (y)
50		
100		
150		
200		
...		
500		
1000		

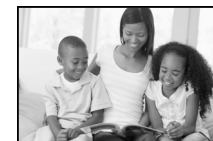


- What costs do you need to consider in owning a car?
- What costs are constant? What costs vary?
- Which car would you pick and why?

### Show me the Money!

Statistics + Employment and Income

Job	Wage	Job	Wage
1. Babysitting	<\$7	16. Babysitting	\$7
2. Lawn Mowing	\$10	17. Babysitting	\$8
3. Snow shoveling	\$8	18. Lawn Mowing	\$9
4. Dog Walking	\$7	19. Babysitting	\$7
5. None	\$0	20. Babysitting	\$7
6. Washing cars	<\$7	21. Babysitting	<\$7
7. None	\$0	22. Lemonade Stand	<\$7
8. None	\$0	23. Babysitting	\$8
9. None	\$0	24. Babysitting	\$8
10. Babysitting	\$7	25. Washing cars	<\$7
11. Babysitting	>\$11	26. Lawn Mowing	\$10
12. Washing cars	<\$7	27. Dog Walking	\$8
13. Lawn Mowing	\$9	28. Lawn Mowing	\$10
14. Lawn Mowing	\$9	29. Dog Walking	<\$7
15. Dog Walking	<\$7	30. Lawn Mowing	\$10



How can you use data to determine what job wages you might earn as a middle school student?

What factors influence what you might make and what job you might pursue?

Activities adapted from Bay-Williams, J.M., Bush, S. B., Peters, S. A., & McGatha, M. B. (2015). *On the money: Math activities to build financial literacy, grades 6-8*. Reston, VA: NCTM.

# National Standards in K–12 Personal Finance Education (4<sup>th</sup> Edition)

(Jump\$Start Coalition for Personal Financial Literacy, 2015)

[http://www.jumpstart.org/assets/files/2015\\_NationalStandardsBook.pdf](http://www.jumpstart.org/assets/files/2015_NationalStandardsBook.pdf)

## **Spending and Saving**

*Overall Competency:* Apply strategies to monitor income and expenses, plan for spending and save for future goals.

Standard 1: Develop a plan for spending and saving.

Standard 2: Develop a system for keeping and using financial records.

Standard 3: Describe how to use different payment methods.

Standard 4: Apply consumer skills to purchase decisions.

## **Credit and Debt**

*Overall Competency:* Develop strategies to control and manage credit and debt.

Standard 1: Analyze the costs and benefits of various types of credit.

Standard 2: Summarize a borrowers' rights and responsibilities related to credit reports.

Standard 3: Apply strategies to avoid or correct debt management problems.

Standard 4: Summarize major consumer credit laws.

## **Employment and Income**

*Overall Competency:* Use a career plan to develop personal income potential.

Standard 1: Explore job and career options.

Standard 2: Compare sources of personal income and compensation.

Standard 3: Analyze factors that affect net income.

## **Investing**

*Overall Competency:* Implement a diversified investment strategy that is compatible with personal financial goals.

Standard 1: Explain how investing may build wealth and help meet financial goals.

Standard 2: Evaluate investment alternatives.

Standard 3: Demonstrate how to buy and sell investments.

Standard 4: Investigate how agencies protect investors and regulate financial markets and products.

## **Risk Management and Insurance**

*Overall Competency:* Apply appropriate and cost-effective risk management strategies.

Standard 1: Identify common types of risks and basic risk management methods.

Standard 2: Justify reasons to use property and liability insurance.

Standard 3: Justify reasons to use health, disability, long term care and life insurance.

## **Financial Decision Making**

*Overall Competency:* Apply reliable information and systematic decision making to personal financial decisions.

Standard 1: Recognize the responsibilities associated with personal financial decisions.

Standard 2: Use reliable sources when making financial decisions.

Standard 3: Summarize major consumer protection laws.

Standard 4: Make criterion-based financial decisions by systematically considering alternatives and consequences.

Standard 5: Apply communication strategies when discussing financial issues.

Standard 6: Analyze the requirements of contractual obligations.

Standard 7: Control personal information.

Standard 8: Use a personal financial plan.