



Business Math – Part 1

Michigan State Content Expectations

Course Description

Business Math will provide key skills of personal finance, allowing learners to gain the ability to think and solve many different kinds of transactions that take place in daily life.

Mathematics with Business Applications

Unit 1 Description

This unit will introduce the concepts of gross income, net income, record keeping and checking accounts.

Essential Content and Skills

The learner will:

- Calculate gross income.
 - Calculate net income.
 - Manage money through accurate record keeping.
 - Understand a checking account.
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Unit 1 Michigan State Content Expectations

[Click here to view the Michigan DOE Curriculum Content Standards.](#)

Unit 1 Lesson 1: Hourly and Overtime Pay

State Standard	Description
N.FL.06.15	Solve applied problems that use the four operations with appropriate decimal numbers.

Unit 1 Lesson 2: Time Cards and Piecework Pay

State Standard	Description
N.FL.06.15	Solve applied problems that use the four operations with appropriate decimal numbers.

Course Name - Part

Pennsylvania State Standards (continued)

Unit 1 Lesson 3: Salary and Commission

State Standard	Description
N.ME.05.09	Understand percentages as parts out of 100, use % notation, and express a part of a whole as a percentage. Solve applied problems involving fractions and decimals; include rounding of answers and checking reasonableness. Solve applied problems that use the four operations with appropriate decimal numbers.
N.FL.05.20	
N.FL.06.15	

Unit 1 Lesson 4: Graduated Commission and Federal Income Tax

State Standard	Description
D.RE.04.03	Solve problems using data presented in tables and bar graphs, e.g., compare data represented in two bar graphs and read bar graphs showing two data sets. Read, write, interpret, and compare decimals up to two decimal places. Write tenths and hundredths in decimal and fraction forms, and know the decimal equivalents for halves and fourths. Understand percentages as parts out of 100, use % notation, and express a part of a whole as a percentage. Express fractions and decimals as percentages and vice versa. Calculate part of a number given the percentage and the number. Solve contextual problems involving percentages such as sales taxes and tips. Solve applied problems that use the four operations with appropriate decimal numbers.
N.ME.04.18	
N.ME.04.19	
N.ME.05.09	
N.MR.05.22	
N.FL.06.12	
N.MR.06.13	
N.FL.06.15	

Unit 1 Lesson 5: State Income Tax

State Standard	Description
D.RE.04.03	Solve problems using data presented in tables and bar graphs, e.g., compare data represented in two bar graphs and read bar graphs showing two data sets. Read, write, interpret, and compare decimals up to two decimal places. Write tenths and hundredths in decimal and fraction forms, and know the decimal equivalents for halves and fourths. Understand percentages as parts out of 100, use % notation, and express a part of a whole as a percentage. Express fractions and decimals as percentages and vice versa. Calculate part of a number given the percentage and the number. Solve contextual problems involving percentages such as sales taxes and tips. Solve applied problems that use the four operations with appropriate decimal numbers.
N.ME.04.18	
N.ME.04.19	
N.ME.05.09	
N.MR.05.22	
N.FL.06.12	
N.MR.06.13	
N.FL.06.15	

Course Name - Part

Pennsylvania State Standards (continued)

Unit 1 Lesson 6: Graduated State Income Tax, Social Security, and Medicare

State Standard	Description
D.RE.04.03	Solve problems using data presented in tables and bar graphs, e.g., compare data represented in two bar graphs and read bar graphs showing two data sets.
N.ME.04.18	Read, write, interpret, and compare decimals up to two decimal places.
N.ME.04.19	Write tenths and hundredths in decimal and fraction forms, and know the decimal equivalents for halves and fourths.
N.ME.05.09	Understand percentages as parts out of 100, use % notation, and express a part of a whole as a percentage.
N.MR.05.22	Express fractions and decimals as percentages and vice versa.
N.FL.06.12	Calculate part of a number given the percentage and the number.
N.MR.06.13	Solve contextual problems involving percentages such as sales taxes and tips.
N.FL.06.15	Solve applied problems that use the four operations with appropriate decimal numbers.

Unit 1 Lesson 7: Group Health Insurance and Statement of Earnings

State Standard	Description
D.RE.04.03	Solve problems using data presented in tables and bar graphs, e.g., compare data represented in two bar graphs and read bar graphs showing two data sets.
N.ME.04.18	Read, write, interpret, and compare decimals up to two decimal places.
N.ME.04.19	Write tenths and hundredths in decimal and fraction forms, and know the decimal equivalents for halves and fourths.
N.ME.05.09	Understand percentages as parts out of 100, use % notation, and express a part of a whole as a percentage.
N.MR.05.22	Express fractions and decimals as percentages and vice versa.
N.FL.06.12	Calculate part of a number given the percentage and the number.
N.MR.06.13	Solve contextual problems involving percentages such as sales taxes and tips.
N.FL.06.15	Solve applied problems that use the four operations with appropriate decimal numbers.

Unit 1 Lesson 8: Average Monthly Expenditures and Preparing a Budget Sheet

State Standard	Description
D.RE.04.03	Solve problems using data presented in tables and bar graphs, e.g., compare data represented in two bar graphs and read bar graphs showing two data sets.
N.ME.04.18	Read, write, interpret, and compare decimals up to two decimal places.
N.ME.04.19	Write tenths and hundredths in decimal and fraction forms, and know the decimal equivalents for halves and fourths.
N.ME.05.09	Understand percentages as parts out of 100, use % notation, and express a part of a whole as a percentage.
N.MR.05.22	Express fractions and decimals as percentages and vice versa.
N.FL.06.12	Calculate part of a number given the percentage and the number.
N.MR.06.13	Solve contextual problems involving percentages such as sales taxes and tips.
N.FL.06.15	Solve applied problems that use the four operations with appropriate decimal numbers.

Course Name - Part

Pennsylvania State Standards (continued)

Unit 1 Lesson 9: Using a Budget and Deposits

State Standard	Description
D.RE.04.03	Solve problems using data presented in tables and bar graphs, e.g., compare data represented in two bar graphs and read bar graphs showing two data sets. Read, write, interpret, and compare decimals up to two decimal places. Write tenths and hundredths in decimal and fraction forms, and know the decimal equivalents for halves and fourths. Understand percentages as parts out of 100, use % notation, and express a part of a whole as a percentage. Express fractions and decimals as percentages and vice versa. Calculate part of a number given the percentage and the number. Solve contextual problems involving percentages such as sales taxes and tips. Solve applied problems that use the four operations with appropriate decimal numbers.
N.ME.04.18	
N.ME.04.19	
N.ME.05.09	
N.MR.05.22	
N.FL.06.12	
N.MR.06.13	
N.FL.06.15	

Unit 1 Lesson 10: Writing Checks and Check Registers

State Standard	Description
D.RE.04.03	Solve problems using data presented in tables and bar graphs, e.g., compare data represented in two bar graphs and read bar graphs showing two data sets. Read, write, interpret, and compare decimals up to two decimal places. Write tenths and hundredths in decimal and fraction forms, and know the decimal equivalents for halves and fourths. Understand percentages as parts out of 100, use % notation, and express a part of a whole as a percentage. Express fractions and decimals as percentages and vice versa. Calculate part of a number given the percentage and the number. Solve contextual problems involving percentages such as sales taxes and tips. Solve applied problems that use the four operations with appropriate decimal numbers.
N.ME.04.18	
N.ME.04.19	
N.ME.05.09	
N.MR.05.22	
N.FL.06.12	
N.MR.06.13	
N.FL.06.15	

Course Name - Part

Pennsylvania State Standards (continued)

Unit 2 Description

This unit will introduce bank statements and online banking for checking accounts, savings accounts and cash purchases.

Essential Content and Skills

The learner will:

- Calculate checking account statement balances.
- Compute online banking charges.
- Assess the use of savings accounts.
- Examine cash purchases.

Unit 2 Michigan State Content Expectations

Unit 2 Lesson 1: Bank Statements

State Standard	Description
D.RE.04.03	Solve problems using data presented in tables and bar graphs, e.g., compare data represented in two bar graphs and read bar graphs showing two data sets. Read, write, interpret, and compare decimals up to two decimal places. Write tenths and hundredths in decimal and fraction forms, and know the decimal equivalents for halves and fourths. Understand percentages as parts out of 100, use % notation, and express a part of a whole as a percentage. Express fractions and decimals as percentages and vice versa. Calculate part of a number given the percentage and the number. Solve contextual problems involving percentages such as sales taxes and tips. Solve applied problems that use the four operations with appropriate decimal numbers.
N.ME.04.18	
N.ME.04.19	
N.ME.05.09	
N.MR.05.22	
N.FL.06.12	
N.MR.06.13 N.FL.06.15	

Unit 2 Lesson 2: Online Banking and Deposits

State Standard	Description
D.RE.04.03	Solve problems using data presented in tables and bar graphs, e.g., compare data represented in two bar graphs and read bar graphs showing two data sets. Read, write, interpret, and compare decimals up to two decimal places. Write tenths and hundredths in decimal and fraction forms, and know the decimal equivalents for halves and fourths. Understand percentages as parts out of 100, use % notation, and express a part of a whole as a percentage. Express fractions and decimals as percentages and vice versa. Calculate part of a number given the percentage and the number. Solve contextual problems involving percentages such as sales taxes and tips. Solve applied problems that use the four operations with appropriate decimal numbers.
N.ME.04.18	
N.ME.04.19	
N.ME.05.09	
N.MR.05.22	
N.FL.06.12	
N.MR.06.13 N.FL.06.15	

Course Name - Part

Pennsylvania State Standards (continued)

Unit 2 Lesson 3: Withdrawals and Account Statements

State Standard	Description
D.RE.04.03	Solve problems using data presented in tables and bar graphs, e.g., compare data represented in two bar graphs and read bar graphs showing two data sets.
N.ME.04.18	Read, write, interpret, and compare decimals up to two decimal places.
N.ME.04.19	Write tenths and hundredths in decimal and fraction forms, and know the decimal equivalents for halves and fourths.
N.ME.05.09	Understand percentages as parts out of 100, use % notation, and express a part of a whole as a percentage.
N.MR.05.22	Express fractions and decimals as percentages and vice versa.
N.FL.06.12	Calculate part of a number given the percentage and the number.
N.MR.06.13	Solve contextual problems involving percentages such as sales taxes and tips.
N.FL.06.15	Solve applied problems that use the four operations with appropriate decimal numbers.

Unit 2 Lesson 4: Simple and Compound Interest

State Standard	Description
D.RE.04.03	Solve problems using data presented in tables and bar graphs, e.g., compare data represented in two bar graphs and read bar graphs showing two data sets.
N.ME.04.18	Read, write, interpret, and compare decimals up to two decimal places.
N.ME.04.19	Write tenths and hundredths in decimal and fraction forms, and know the decimal equivalents for halves and fourths.
N.ME.05.09	Understand percentages as parts out of 100, use % notation, and express a part of a whole as a percentage.
N.MR.05.22	Express fractions and decimals as percentages and vice versa.
N.FL.06.12	Calculate part of a number given the percentage and the number.
N.MR.06.13	Solve contextual problems involving percentages such as sales taxes and tips.
N.FL.06.15	Solve applied problems that use the four operations with appropriate decimal numbers.

Unit 2 Lesson 5: Saving for College

State Standard	Description
D.RE.04.03	Solve problems using data presented in tables and bar graphs, e.g., compare data represented in two bar graphs and read bar graphs showing two data sets.
N.ME.04.18	Read, write, interpret, and compare decimals up to two decimal places.
N.ME.04.19	Write tenths and hundredths in decimal and fraction forms, and know the decimal equivalents for halves and fourths.
N.ME.05.09	Understand percentages as parts out of 100, use % notation, and express a part of a whole as a percentage.
N.MR.05.22	Express fractions and decimals as percentages and vice versa.
N.FL.06.12	Calculate part of a number given the percentage and the number.
N.MR.06.13	Solve contextual problems involving percentages such as sales taxes and tips.
N.FL.06.15	Solve applied problems that use the four operations with appropriate decimal numbers.

Course Name - Part

Pennsylvania State Standards (continued)

Unit 2 Lesson 6: Compound Interest Tables and Daily Compounding

State Standard	Description
D.RE.04.03	Solve problems using data presented in tables and bar graphs, e.g., compare data represented in two bar graphs and read bar graphs showing two data sets. Read, write, interpret, and compare decimals up to two decimal places. Write tenths and hundredths in decimal and fraction forms, and know the decimal equivalents for halves and fourths. Understand percentages as parts out of 100, use % notation, and express a part of a whole as a percentage. Express fractions and decimals as percentages and vice versa. Calculate part of a number given the percentage and the number. Solve contextual problems involving percentages such as sales taxes and tips. Solve applied problems that use the four operations with appropriate decimal numbers.
N.ME.04.18	
N.ME.04.19	
N.ME.05.09	
N.MR.05.22	
N.FL.06.12	
N.MR.06.13	
N.FL.06.15	

Unit 2 Lesson 7: Annuities and Sales Tax

State Standard	Description
D.RE.04.03	Solve problems using data presented in tables and bar graphs, e.g., compare data represented in two bar graphs and read bar graphs showing two data sets. Read, write, interpret, and compare decimals up to two decimal places. Write tenths and hundredths in decimal and fraction forms, and know the decimal equivalents for halves and fourths. Understand percentages as parts out of 100, use % notation, and express a part of a whole as a percentage. Express fractions and decimals as percentages and vice versa. Calculate part of a number given the percentage and the number. Solve contextual problems involving percentages such as sales taxes and tips. Solve applied problems that use the four operations with appropriate decimal numbers.
N.ME.04.18	
N.ME.04.19	
N.ME.05.09	
N.MR.05.22	
N.FL.06.12	
N.MR.06.13	
N.FL.06.15	

Unit 2 Lesson 8: Total Purchase Price and Unit Pricing

State Standard	Description
D.RE.04.03	Solve problems using data presented in tables and bar graphs, e.g., compare data represented in two bar graphs and read bar graphs showing two data sets. Read, write, interpret, and compare decimals up to two decimal places. Write tenths and hundredths in decimal and fraction forms, and know the decimal equivalents for halves and fourths. Understand percentages as parts out of 100, use % notation, and express a part of a whole as a percentage. Express fractions and decimals as percentages and vice versa. Calculate part of a number given the percentage and the number. Solve contextual problems involving percentages such as sales taxes and tips. Solve applied problems that use the four operations with appropriate decimal numbers.
N.ME.04.18	
N.ME.04.19	
N.ME.05.09	
N.MR.05.22	
N.FL.06.12	
N.MR.06.13	
N.FL.06.15	

Course Name - Part

Pennsylvania State Standards (continued)

Unit 2 Lesson 9: Comparison Shopping: Coupons and Rebates

State Standard	Description
D.RE.04.03	Solve problems using data presented in tables and bar graphs, e.g., compare data represented in two bar graphs and read bar graphs showing two data sets.
N.ME.04.18	Read, write, interpret, and compare decimals up to two decimal places.
N.ME.04.19	Write tenths and hundredths in decimal and fraction forms, and know the decimal equivalents for halves and fourths.
N.ME.05.09	Understand percentages as parts out of 100, use % notation, and express a part of a whole as a percentage.
N.MR.05.22	Express fractions and decimals as percentages and vice versa.
N.FL.06.12	Calculate part of a number given the percentage and the number.
N.MR.06.13	Solve contextual problems involving percentages such as sales taxes and tips.
N.FL.06.15	Solve applied problems that use the four operations with appropriate decimal numbers.

Unit 2 Lesson 10: Markdown and Sale Price

State Standard	Description
D.RE.04.03	Solve problems using data presented in tables and bar graphs, e.g., compare data represented in two bar graphs and read bar graphs showing two data sets.
N.ME.04.18	Read, write, interpret, and compare decimals up to two decimal places.
N.ME.04.19	Write tenths and hundredths in decimal and fraction forms, and know the decimal equivalents for halves and fourths.
N.ME.05.09	Understand percentages as parts out of 100, use % notation, and express a part of a whole as a percentage.
N.MR.05.22	Express fractions and decimals as percentages and vice versa.
N.FL.06.12	Calculate part of a number given the percentage and the number.
N.MR.06.13	Solve contextual problems involving percentages such as sales taxes and tips.
N.FL.06.15	Solve applied problems that use the four operations with appropriate decimal numbers.

Course Name - Part

Pennsylvania State Standards (continued)

Unit 3 Description

This unit will introduce the concepts of charge accounts, credit cards, loans and vehicle costs.

Essential Content and Skills

The learner will:

- Examine the costs associated with charge accounts.
- Analyze the positives and negatives of credit cards.
- Calculate and compare loan costs.
- Compute costs associated with operating and maintaining a vehicle.

Unit 3 Michigan State Content Expectations

Unit 3 Lesson 1: Account Statements and Finance Charges

State Standard	Description
D.RE.04.03	Solve problems using data presented in tables and bar graphs, e.g., compare data represented in two bar graphs and read bar graphs showing two data sets. Read, write, interpret, and compare decimals up to two decimal places. Write tenths and hundredths in decimal and fraction forms, and know the decimal equivalents for halves and fourths. Understand percentages as parts out of 100, use % notation, and express a part of a whole as a percentage. Express fractions and decimals as percentages and vice versa. Calculate part of a number given the percentage and the number. Solve contextual problems involving percentages such as sales taxes and tips. Solve applied problems that use the four operations with appropriate decimal numbers.
N.ME.04.18	
N.ME.04.19	
N.ME.05.09	
N.MR.05.22	
N.FL.06.12	
N.MR.06.13	
N.FL.06.15	

Unit 3 Lesson 2: Average-Daily-Balance Method

State Standard	Description
D.RE.04.03	Solve problems using data presented in tables and bar graphs, e.g., compare data represented in two bar graphs and read bar graphs showing two data sets. Read, write, interpret, and compare decimals up to two decimal places. Write tenths and hundredths in decimal and fraction forms, and know the decimal equivalents for halves and fourths. Understand percentages as parts out of 100, use % notation, and express a part of a whole as a percentage. Express fractions and decimals as percentages and vice versa. Calculate part of a number given the percentage and the number. Solve contextual problems involving percentages such as sales taxes and tips. Solve applied problems that use the four operations with appropriate decimal numbers.
N.ME.04.18	
N.ME.04.19	
N.ME.05.09	
N.MR.05.22	
N.FL.06.12	
N.MR.06.13	
N.FL.06.15	

Course Name - Part

Pennsylvania State Standards (continued)

Unit 3 Lesson 3: Credit Cards

State Standard	Description
D.RE.04.03	Solve problems using data presented in tables and bar graphs, e.g., compare data represented in two bar graphs and read bar graphs showing two data sets.
N.ME.04.18	Read, write, interpret, and compare decimals up to two decimal places.
N.ME.04.19	Write tenths and hundredths in decimal and fraction forms, and know the decimal equivalents for halves and fourths.
N.ME.05.09	Understand percentages as parts out of 100, use % notation, and express a part of a whole as a percentage.
N.MR.05.22	Express fractions and decimals as percentages and vice versa.
N.FL.06.12	Calculate part of a number given the percentage and the number.
N.MR.06.13	Solve contextual problems involving percentages such as sales taxes and tips.
N.FL.06.15	Solve applied problems that use the four operations with appropriate decimal numbers.

Unit 3 Lesson 4: Single Payment and Installment Loans

State Standard	Description
D.RE.04.03	Solve problems using data presented in tables and bar graphs, e.g., compare data represented in two bar graphs and read bar graphs showing two data sets.
N.ME.04.18	Read, write, interpret, and compare decimals up to two decimal places.
N.ME.04.19	Write tenths and hundredths in decimal and fraction forms, and know the decimal equivalents for halves and fourths.
N.ME.05.09	Understand percentages as parts out of 100, use % notation, and express a part of a whole as a percentage.
N.MR.05.22	Express fractions and decimals as percentages and vice versa.
N.FL.06.12	Calculate part of a number given the percentage and the number.
N.MR.06.13	Solve contextual problems involving percentages such as sales taxes and tips.
N.FL.06.15	Solve applied problems that use the four operations with appropriate decimal numbers.

Unit 3 Lesson 5: Paying Off Simple Interest Loans

State Standard	Description
D.RE.04.03	Solve problems using data presented in tables and bar graphs, e.g., compare data represented in two bar graphs and read bar graphs showing two data sets.
N.ME.04.18	Read, write, interpret, and compare decimals up to two decimal places.
N.ME.04.19	Write tenths and hundredths in decimal and fraction forms, and know the decimal equivalents for halves and fourths.
N.ME.05.09	Understand percentages as parts out of 100, use % notation, and express a part of a whole as a percentage.
N.MR.05.22	Express fractions and decimals as percentages and vice versa.
N.FL.06.12	Calculate part of a number given the percentage and the number.
N.MR.06.13	Solve contextual problems involving percentages such as sales taxes and tips.
N.FL.06.15	Solve applied problems that use the four operations with appropriate decimal numbers.

Course Name - Part

Pennsylvania State Standards (continued)

Unit 3 Lesson 6: Installment Loans: Allocation of Monthly Payment and Paying Off

State Standard	Description
D.RE.04.03	Solve problems using data presented in tables and bar graphs, e.g., compare data represented in two bar graphs and read bar graphs showing two data sets.
N.ME.04.18	Read, write, interpret, and compare decimals up to two decimal places.
N.ME.04.19	Write tenths and hundredths in decimal and fraction forms, and know the decimal equivalents for halves and fourths.
N.ME.05.09	Understand percentages as parts out of 100, use % notation, and express a part of a whole as a percentage.
N.MR.05.22	Express fractions and decimals as percentages and vice versa.
N.FL.06.12	Calculate part of a number given the percentage and the number.
N.MR.06.13	Solve contextual problems involving percentages such as sales taxes and tips.
N.FL.06.15	Solve applied problems that use the four operations with appropriate decimal numbers.

Unit 3 Lesson 7: Determining APR and Purchasing New Vehicle

State Standard	Description
D.RE.04.03	Solve problems using data presented in tables and bar graphs, e.g., compare data represented in two bar graphs and read bar graphs showing two data sets.
N.ME.04.18	Read, write, interpret, and compare decimals up to two decimal places.
N.ME.04.19	Write tenths and hundredths in decimal and fraction forms, and know the decimal equivalents for halves and fourths.
N.ME.05.09	Understand percentages as parts out of 100, use % notation, and express a part of a whole as a percentage.
N.MR.05.22	Express fractions and decimals as percentages and vice versa.
N.FL.06.12	Calculate part of a number given the percentage and the number.
N.MR.06.13	Solve contextual problems involving percentages such as sales taxes and tips.
N.FL.06.15	Solve applied problems that use the four operations with appropriate decimal numbers.

Unit 3 Lesson 8: Dealer's Cost and Purchasing a Used Vehicle

State Standard	Description
D.RE.04.03	Solve problems using data presented in tables and bar graphs, e.g., compare data represented in two bar graphs and read bar graphs showing two data sets.
N.ME.04.18	Read, write, interpret, and compare decimals up to two decimal places.
N.ME.04.19	Write tenths and hundredths in decimal and fraction forms, and know the decimal equivalents for halves and fourths.
N.ME.05.09	Understand percentages as parts out of 100, use % notation, and express a part of a whole as a percentage.
N.MR.05.22	Express fractions and decimals as percentages and vice versa.
N.FL.06.12	Calculate part of a number given the percentage and the number.
N.MR.06.13	Solve contextual problems involving percentages such as sales taxes and tips.
N.FL.06.15	Solve applied problems that use the four operations with appropriate decimal numbers.

Course Name - Part

Pennsylvania State Standards (continued)

Unit 3 Lesson 9: Vehicle Costs—Insurance, Operation, and Maintenance

State Standard	Description
D.RE.04.03	Solve problems using data presented in tables and bar graphs, e.g., compare data represented in two bar graphs and read bar graphs showing two data sets. Read, write, interpret, and compare decimals up to two decimal places. Write tenths and hundredths in decimal and fraction forms, and know the decimal equivalents for halves and fourths. Understand percentages as parts out of 100, use % notation, and express a part of a whole as a percentage. Express fractions and decimals as percentages and vice versa. Calculate part of a number given the percentage and the number. Solve contextual problems involving percentages such as sales taxes and tips. Solve applied problems that use the four operations with appropriate decimal numbers.
N.ME.04.18	
N.ME.04.19	
N.ME.05.09	
N.MR.05.22	
N.FL.06.12	
N.MR.06.13	
N.FL.06.15	

Unit 3 Lesson 10: Leasing and Renting a Vehicle

State Standard	Description
D.RE.04.03	Solve problems using data presented in tables and bar graphs, e.g., compare data represented in two bar graphs and read bar graphs showing two data sets. Read, write, interpret, and compare decimals up to two decimal places. Write tenths and hundredths in decimal and fraction forms, and know the decimal equivalents for halves and fourths. Understand percentages as parts out of 100, use % notation, and express a part of a whole as a percentage. Express fractions and decimals as percentages and vice versa. Calculate part of a number given the percentage and the number. Solve contextual problems involving percentages such as sales taxes and tips. Solve applied problems that use the four operations with appropriate decimal numbers.
N.ME.04.18	
N.ME.04.19	
N.ME.05.09	
N.MR.05.22	
N.FL.06.12	
N.MR.06.13	
N.FL.06.15	

Course Name - Part

Pennsylvania State Standards (continued)

Unit 4 Description

This unit will introduce the concepts of housing costs, insurance and investments.

Essential Content and Skills

The learner will:

- Investigate costs associated with owning a home.
- Calculate health and life insurance premiums
- Analyze investments such as CDs, stocks and bonds.

Unit 4 Michigan State Content Expectations

Unit 4 Lesson 1: Mortgage Loans, Monthly Payment and Total Interest

State Standard	Description
D.RE.04.03	Solve problems using data presented in tables and bar graphs, e.g., compare data represented in two bar graphs and read bar graphs showing two data sets. Read, write, interpret, and compare decimals up to two decimal places. Write tenths and hundredths in decimal and fraction forms, and know the decimal equivalents for halves and fourths. Understand percentages as parts out of 100, use % notation, and express a part of a whole as a percentage. Express fractions and decimals as percentages and vice versa. Calculate part of a number given the percentage and the number. Solve contextual problems involving percentages such as sales taxes and tips. Solve applied problems that use the four operations with appropriate decimal numbers.
N.ME.04.18	
N.ME.04.19	
N.ME.05.09	
N.MR.05.22	
N.FL.06.12	
N.MR.06.13	
N.FL.06.15	

Unit 4 Lesson 2: Closing Costs and Monthly Payment

State Standard	Description
D.RE.04.03	Solve problems using data presented in tables and bar graphs, e.g., compare data represented in two bar graphs and read bar graphs showing two data sets. Read, write, interpret, and compare decimals up to two decimal places. Write tenths and hundredths in decimal and fraction forms, and know the decimal equivalents for halves and fourths. Understand percentages as parts out of 100, use % notation, and express a part of a whole as a percentage. Express fractions and decimals as percentages and vice versa. Calculate part of a number given the percentage and the number. Solve contextual problems involving percentages such as sales taxes and tips. Solve applied problems that use the four operations with appropriate decimal numbers.
N.ME.04.18	
N.ME.04.19	
N.ME.05.09	
N.MR.05.22	
N.FL.06.12	
N.MR.06.13	
N.FL.06.15	

Course Name - Part

Pennsylvania State Standards (continued)

Unit 4 Lesson 3: Real Estate Taxes and Homeowners Insurance

State Standard	Description
D.RE.04.03	Solve problems using data presented in tables and bar graphs, e.g., compare data represented in two bar graphs and read bar graphs showing two data sets.
N.ME.04.18	Read, write, interpret, and compare decimals up to two decimal places.
N.ME.04.19	Write tenths and hundredths in decimal and fraction forms, and know the decimal equivalents for halves and fourths.
N.ME.05.09	Understand percentages as parts out of 100, use % notation, and express a part of a whole as a percentage.
N.MR.05.22	Express fractions and decimals as percentages and vice versa.
N.FL.06.12	Calculate part of a number given the percentage and the number.
N.MR.06.13	Solve contextual problems involving percentages such as sales taxes and tips.
N.FL.06.15	Solve applied problems that use the four operations with appropriate decimal numbers.

Unit 4 Lesson 4: Homeowners Insurance Premium and Other Housing Costs

State Standard	Description
D.RE.04.03	Solve problems using data presented in tables and bar graphs, e.g., compare data represented in two bar graphs and read bar graphs showing two data sets.
N.ME.04.18	Read, write, interpret, and compare decimals up to two decimal places.
N.ME.04.19	Write tenths and hundredths in decimal and fraction forms, and know the decimal equivalents for halves and fourths.
N.ME.05.09	Understand percentages as parts out of 100, use % notation, and express a part of a whole as a percentage.
N.MR.05.22	Express fractions and decimals as percentages and vice versa.
N.FL.06.12	Calculate part of a number given the percentage and the number.
N.MR.06.13	Solve contextual problems involving percentages such as sales taxes and tips.
N.FL.06.15	Solve applied problems that use the four operations with appropriate decimal numbers.

Unit 4 Lesson 5: Buying a Home

State Standard	Description
D.RE.04.03	Solve problems using data presented in tables and bar graphs, e.g., compare data represented in two bar graphs and read bar graphs showing two data sets.
N.ME.04.18	Read, write, interpret, and compare decimals up to two decimal places.
N.ME.04.19	Write tenths and hundredths in decimal and fraction forms, and know the decimal equivalents for halves and fourths.
N.ME.05.09	Understand percentages as parts out of 100, use % notation, and express a part of a whole as a percentage.
N.MR.05.22	Express fractions and decimals as percentages and vice versa.
N.FL.06.12	Calculate part of a number given the percentage and the number.
N.MR.06.13	Solve contextual problems involving percentages such as sales taxes and tips.
N.FL.06.15	Solve applied problems that use the four operations with appropriate decimal numbers.

Course Name - Part

Pennsylvania State Standards (continued)

Unit 4 Lesson 6: Health Insurance Premiums and Benefits

State Standard	Description
D.RE.04.03	Solve problems using data presented in tables and bar graphs, e.g., compare data represented in two bar graphs and read bar graphs showing two data sets. Read, write, interpret, and compare decimals up to two decimal places. Write tenths and hundredths in decimal and fraction forms, and know the decimal equivalents for halves and fourths. Understand percentages as parts out of 100, use % notation, and express a part of a whole as a percentage. Express fractions and decimals as percentages and vice versa. Calculate part of a number given the percentage and the number. Solve contextual problems involving percentages such as sales taxes and tips. Solve applied problems that use the four operations with appropriate decimal numbers.
N.ME.04.18	
N.ME.04.19	
N.ME.05.09	
N.MR.05.22	
N.FL.06.12	
N.MR.06.13	
N.FL.06.15	

Unit 4 Lesson 7: Term and Other Types of Life Insurance

State Standard	Description
D.RE.04.03	Solve problems using data presented in tables and bar graphs, e.g., compare data represented in two bar graphs and read bar graphs showing two data sets. Read, write, interpret, and compare decimals up to two decimal places. Write tenths and hundredths in decimal and fraction forms, and know the decimal equivalents for halves and fourths. Understand percentages as parts out of 100, use % notation, and express a part of a whole as a percentage. Express fractions and decimals as percentages and vice versa. Calculate part of a number given the percentage and the number. Solve contextual problems involving percentages such as sales taxes and tips. Solve applied problems that use the four operations with appropriate decimal numbers.
N.ME.04.18	
N.ME.04.19	
N.ME.05.09	
N.MR.05.22	
N.FL.06.12	
N.MR.06.13	
N.FL.06.15	

Unit 4 Lesson 8: Certificates of Deposit and Effective Annual Yield

State Standard	Description
D.RE.04.03	Solve problems using data presented in tables and bar graphs, e.g., compare data represented in two bar graphs and read bar graphs showing two data sets. Read, write, interpret, and compare decimals up to two decimal places. Write tenths and hundredths in decimal and fraction forms, and know the decimal equivalents for halves and fourths. Understand percentages as parts out of 100, use % notation, and express a part of a whole as a percentage. Express fractions and decimals as percentages and vice versa. Calculate part of a number given the percentage and the number. Solve contextual problems involving percentages such as sales taxes and tips. Solve applied problems that use the four operations with appropriate decimal numbers.
N.ME.04.18	
N.ME.04.19	
N.ME.05.09	
N.MR.05.22	
N.FL.06.12	
N.MR.06.13	
N.FL.06.15	

Course Name - Part

Pennsylvania State Standards (continued)

Unit 4 Lesson 9: Stocks and Dividends

State Standard	Description
D.RE.04.03	Solve problems using data presented in tables and bar graphs, e.g., compare data represented in two bar graphs and read bar graphs showing two data sets.
N.ME.04.18	Read, write, interpret, and compare decimals up to two decimal places.
N.ME.04.19	Write tenths and hundredths in decimal and fraction forms, and know the decimal equivalents for halves and fourths.
N.ME.05.09	Understand percentages as parts out of 100, use % notation, and express a part of a whole as a percentage.
N.MR.05.22	Express fractions and decimals as percentages and vice versa.
N.FL.06.12	Calculate part of a number given the percentage and the number.
N.MR.06.13	Solve contextual problems involving percentages such as sales taxes and tips.
N.FL.06.15	Solve applied problems that use the four operations with appropriate decimal numbers.

Unit 4 Lesson 10: Selling Stocks and Bonds

State Standard	Description
D.RE.04.03	Solve problems using data presented in tables and bar graphs, e.g., compare data represented in two bar graphs and read bar graphs showing two data sets.
N.ME.04.18	Read, write, interpret, and compare decimals up to two decimal places.
N.ME.04.19	Write tenths and hundredths in decimal and fraction forms, and know the decimal equivalents for halves and fourths.
N.ME.05.09	Understand percentages as parts out of 100, use % notation, and express a part of a whole as a percentage.
N.MR.05.22	Express fractions and decimals as percentages and vice versa.
N.FL.06.12	Calculate part of a number given the percentage and the number.
N.MR.06.13	Solve contextual problems involving percentages such as sales taxes and tips.
N.FL.06.15	Solve applied problems that use the four operations with appropriate decimal numbers.