GADSDEN CITY CURRICULUM GUIDE ESSENTIAL CONTENT AND SKILLS ALGEBRAIC CONNECTIONS BLOCKS

*TEXT: PEARSON THINKING MATHEMATICALLY*

| Date Taught | Objective | Standard | Text Section | Section Name | Additional Resources | Suggested Time Frame (Block) | Ch. Time Frame |
|---|---|---|---|---|---|---|---|
| | Create algebraic models for application-based problems by developing and solving equations and inequalities, including those involving direct, inverse, and joint variation. Example: The amount of sales tax on a new car is directly proportional to the purchase price of the car. If the sales tax on a $20,500 car is $1,600, what is the purchase price of a new car that has a sales tax of $3,200? [AL-1] | AL 1 | 6.1 | Algebraic Expressions & Formulas | | 2 | 14 Days |
| | | AL 1 | 6.2 | Solving Linear Equations | | 2 | |
| | | AL 1 | 6.3 | Applications of Linear Equations | | 2 | |
| | | AL 1 | 6.5 | Solving Linear Inequalities | | 2 | |
| | | AL 1 | 6.4 | Ratios, Proportions, & Variations | | 2 | |
| | | AL 1 | 6.6 | Solving Quadratic Equations | | 2 | |
| | Review Ch. 6 | | | | | 1 | |
| | Test Ch. 6 | | | | | 1 | |
| | Determine maximum and minimum values of a function using linear programming procedures. [AL-4] Use the extreme value of a given quadratic function to solve applied problems. [AL-6] Use formulas or equations of functions to calculate outcomes of exponential growth or decays. [AL-3] Solve application-based problems by developing and solving systems of linear equations and inequalities. [AL-2] Determine approximate rates of change of nonlinear relationships from graphical and numerical data. [AL-5] | Review | 7.1 | Graphing Functions | | 1 | 17 Days |
| | | Review | 7.2 | Linear Functions and Their Graphs | | 2 | |
| | | AL 4,6 | 7.3 | Quadratic Functions & Their Graphs | | 2 | |
| | | AL 3 | 7.4 | Exponential Functions | | 2 | |
| | | AL 2 | 7.5 | Systems of Equations | | 2 | |
| | | AL 2 | 7.6 | Linear Inequalities in Two Variables | | 2 | |
| | | AL 4 | 7.7 | Linear Programming | | 2 | |
| | | AL 5 | | Rates of Change of nonlinear relationships from Graphical & Numerical Data | Need to find supplement | 2 | |
| | Review Ch. 7 | | | | | 1 | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Test Ch. 7 | | | | | 1 | |
| **Date Taught** | **Objective** | **Standard** | **Text Section** | **Section Name** | **Additional Resources** | **Suggested Time Frame (Block)** | **Ch. Time Frame** |
| | Use analytical, numerical, and graphical methods to make financial and economic decisions, including those involving banking and investments, insurance, personal budgets, credit purchases, recreation, and deceptive and fraudulent pricing and advertising. Create manually or with technological tools, graphs and tables related to personal finance and economics. [AL-7] | Review | 8.1 | Percent | | 1 | 15 Days |
| | | AL 7 | 8.2 | Simple Interest | | 2 | |
| | | AL 7 | 8.3 | Compound Interest | | 2 | |
| | | AL 7 | 8.4 | Installment Buying | | 2 | |
| | | AL 7 | 8.5 | Cost of Home Ownership | | 2 | |
| | | AL 7 | 8.6 | Investing in Stocks, Bonds, & Mutual Funds | | 2 | |
| | | AL 7 | | CDs, Checking Accts, Savings Accts, and Budgets | Need to find supplement | 2 | |
| | Review Ch. 8 | | | | | 1 | |
| | Test Ch. 8 | | | | | 1 | |
| | Critique measurements in terms of precision, accuracy, and approximate error. [AL-10] | AL 10 | 9.1 | Measuring Length; The Metric System | | 2 | 8 Days |
| | | AL 10 | 9.2 | Measuring Area & Volume | | 2 | |
| | | AL 10 | 9.3 | Measuring Weight & Temperature | | 2 | |
| | Review Ch. 9 | | | | | 1 | |
| | Test Ch. 9 | | | | | 1 | |
| | | | | | | | |
| | | | | | | | |

GADSDEN CITY CURRICULUM GUIDE ESSENTIAL CONTENT AND SKILLS ALGEBRAIC CONNECTIONS BLOCKS

*TEXT: PEARSON THINKING MATHEMATICALLY*

| Date Taught | Objective | Standard | Text Section | Section Name | Additional Resources | Suggested Time Frame (Block) | Ch. Time Frame |
|---|---|---|---|---|---|---|---|
| | Determine missing information in an application-based situation using properties of right triangles, including trigonometric ratios and the Pythagorean Theorem. Use a construction or landscape problem to apply trig ratios and the Pythagorean Theorem. [AL-8] Use ratios of perimeters, areas, and volumes of similar figures to solve applied problems. Use blueprint or scale drawing of a house to determine the amount of carpet to be purchased. [AL-11] Analyze aesthetics of physical models for line symmetry, rotational symmetry, or the golden ratio. Identify the symmetry found in nature, art, or architecture. [AL-9] | Review | 10.1 | Points, Lines, Planes, and Angles | | 1 | 15 Days |
| | | AL 8 | 10.2 | Triangles | | 2 | |
| | | AL 11 | 10.3 | Polygons, Quadrilaterals, and Perimeter | | 2 | |
| | | AL 11 | 10.4 | Area and Circumference | | 2 | |
| | | AL 11 | 10.5 | Volume | | 2 | |
| | | AL 8 | 10.6 | Right Triangle Trigonometry | | 2 | |
| | | AL 9 | 13.2 | Symmetry | Need to find supplement | 2 | |
| | Review Ch. 10 | | | | | 1 | |
| | Test Ch. 10 | | | | | 1 | |
| | Create a model of a set of data by estimating the equation of a curve of best fit from tables of values or scatter plots. Create models of election results as a function of population change, inflation or employment rate as a function of time, cholesterol density as a function of age or weight of a person. Predict probabilities given a frequency distribution. [AL-12] | AL 12 | 12.1 | Sampling, Frequency, Distributive, and Graphs | | 2 | 10 Days |
| | | AL 12 | 12.2 | Measure of Central Tendency | | 2 | |
| | | AL 12 | 12.2 | P(x) from frequent Distribution | | 2 | |
| | | AL 12 | 12.5 | Scatter Plots, Correlation, and Regression Lines | | 2 | |
| | Review Ch. 12 | | | | | 1 | |
| | Test Ch. 12 | | | | | 1 | |
| | Review for Semester Exam | | | | | 4 | 5 |
| | Semester Exam | | | | | 1 | |