

## IAA Curriculum

<b>Content Area</b>	Mathematics	<b>Grade</b>	11
<b>Course Name</b>	Business Math		

Unit Number	Unit Topic	Instruction	Review/Reteach/Extension	Assessing	Buffer	Total
1	Number Systems	15	1	1	1	18
2	Solving Equations	5	1	1	2	9
3	Banking	10	1	1	1	13
4	Discounts Markups and Markdowns	12	1	1	1	15
5	Payroll and Interest	10	1	1	2	14
6	Investment Buying	4	1	1	2	8
7	Financial Reports	8	1	1	1	11
8	Depreciation	10	1	1	1	13
9	Inventory Overhead and Taxes	10	1	1	2	14
10	Business Stats	8	1	1	1	11
11	Spreadsheets and Slides	10	1	1	1	13
12	School Store					0
Extra Assessment Days/Days After Testing						35
<b>Total Time</b>		102	11	11	15	174
School Days	174					
Free Days	0					

<b>Unit / Concept</b>	Unit 1: Number Systems			
<b>Big Ideas</b>	Fractions decimals and percents are typically an area where students struggle mathematically. However, being proficient with fractions, decimals and percents is a critical skill when working in the world of business. This unit will provide a refresher on each of these topics and prep students for future topics in the course.			
<b>Essential Understandings</b>	How can you represent money in equivalent forms?			
<b>Competencies</b>	Operations with fractions, decimals and percents. Converting between fractions, decimals and percents			
<b>Dates (estimates only)</b>	<b>Smart Objectives</b>	<b>Instructional Strategies and Activities</b>	<b>Standards</b>	<b>Vocabulary</b>
<b>15 Days</b>	SWBAT add subtract multiply and divide whole numbers	Section 1-1 and 1-2	<b>PA: M06.A-R.1.1</b>	Integer Whole Number Fraction Numerator Denominator Equivalent form Decimal Percent Terminating Decimal Repeating Decimal Rational Number Irrational Number
	SWBAT add subtract multiply and divide fractions	Section 2-2 and 2-3		
	SWBAT add subtract multiply and divide percentages	Section 3-1 and 3-2 • <a href="#">Percent Change Activity</a>		
	SWBAT convert between fractions, decimals and percents	Section 2-1 and 6-1		
	SWBAT apply fractions, decimals and percents to real world situations	Chapter 3 Cumulative Review • A Word Problem Approach		
<b>Resources</b>	Practical Business Math Procedures 13th edition (textbook), Calculator, Desmos.com, Connected-mgrawhill.com, Youtube.com, Kutasoftware.com, workbook, group sharing, teacher teaching/modeling, chromebooks			
<b>Formative Assessments</b>	Do Nows, exit tickets, student responses, classwork, homework, pair sharing/group discussions			
<b>Summative Assessments</b>	Homework, quizzes, test			

**Strategies for ELL and IEP Support**

Use of Calculators, Simplified directions, Translation tools, Reduction in required responses, Frequent check for understandings



<b>Unit / Concept</b>	Unit 2: Solving Equations			
<b>Big Ideas</b>	<ul style="list-style-type: none"> <li>Apply operations performed on whole numbers to expressions and functions</li> <li>Difference between expressions, functions, and equations</li> </ul>			
<b>Essential Understandings</b>	How can mathematical ideas be represented?			
<b>Competencies</b>	Students will be able to: <ul style="list-style-type: none"> <li>Write algebraic expressions and use the order of operations</li> <li>Define appropriate quantities for descriptive modeling</li> <li>Represent and interpret relations and functions</li> <li>Interpret the graphs of functions</li> </ul>			
<b>Dates (estimates only)</b>	<b>Smart Objectives</b>	<b>Instructional Strategies and Activities</b>	<b>Standards</b>	<b>Vocabulary</b>
<b>5 Days</b>	SWBAT solve one step equations SWBAT solve two step equations SWBAT solve multi step equations	Section 5-1 and 5-2	PA: CC.2.1.HS.F.4 CC.2.2.8.B.3 CC.2.2.HS.D.8	Formula, solve an equation, equivalent equations, linear equations, multi-step equation, identity, ratio, proportion,
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<b>Unit / Concept</b>	Unit 3: Banking			
<b>Big Ideas</b>	Banking is a critical part of owning a business and is required to successfully manage the money of a business.			
<b>Essential Understandings</b>	What tools are available from the bank to help grow a business?			
<b>Competencies</b>	Managing Money Writing Checks Understanding Bank Statements Reconciliation			
<b>Dates (estimates only)</b>	<b>Smart Objectives</b>	<b>Instructional Strategies and Activities</b>	<b>Standards</b>	<b>Vocabulary</b>
<b>10 Days</b>	SWBAT Open a checking account SWBAT Write a check SWBAT Balance a Checkbook	Sections 4-1 and 4-2	BCIT: 15..2.12.G Economics: 6.5.9.G 6.5.(3,4).H	Checking Account Check Bank Statement Reconcile Deposit Withdrawal
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<b>Unit / Concept</b>	Unit 4: Discounts, Markups and Markdowns			
<b>Big Idea</b>	Knowing how to price your goods will have a direct impact on your sales.			
<b>Essential Q.</b>	How can you find the best price for your goods?			
<b>Competencies</b>	<ul style="list-style-type: none"> <li>• Trade Discounts</li> <li>• Calculate discounts and credit payments</li> <li>• Calculate Markups</li> <li>• Calculate Markdowns</li> </ul>			
<b>Dates (estimates only)</b>	<b>Smart Objectives</b>	<b>Instructional Strategies and Activities</b>	<b>Standards</b>	<b>Vocabulary</b>
<b>12 Days</b>	SWBAT calculate trade discounts (including freight)	Section 7-1	Economics: 6.2.9.B 6.2.9.C 6.2.9.D	Credit Discount Markup Markdown Breakeven
	SWBAT calculate cash discounts, credit terms and partial payments	Section 7-2		
	SWBAT Calculate markups based on cost	Section 8-1		
	SWBAT Calculate markups based on selling price	Section 8-2		
	SWBAT Calculate markdowns on perishable items	Section 8-3		
	SWBAT Calculate breakeven analysis	Section 8-4		
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<b>Unit / Concept</b>	Unit 5: Payroll and Interest			
<b>Big Idea</b>	In order to attract employees, businesses need to have fair pay while maintaining profits. Businesses also need to be aware of any loans they take and how interest will be calculated.			
<b>Essential Q.</b>	How are employees paid? What are the different kinds of interests? How will the different types of interest affect how much money you pay overall for the loan?			
<b>Competencies</b>	<ul style="list-style-type: none"> <li>• Calculate gross and net pay</li> <li>• Calculate simple interest</li> <li>• Calculate compound interest</li> </ul>			
<b>Dates (estimates only)</b>	<b>Smart Objectives</b>	<b>Instructional Strategies and Activities</b>	<b>Standards</b>	<b>Vocabulary</b>
<b>10 Days</b>	SWBAT calculate various types of employee's gross pay	Section 9-1	BCIT: 15.1.12.M PA: CC.2.2.HS.C.2 CC.2.2.HS.D.1	Gross pay Net pay Social Security Medicare Taxes Simple Interest Maturity Value Compound Interest Interest Rate
	SWBAT compute payroll deductions for employee's pay	Section 9-2		
	SWBAT Calculate simple interest	Section 10-1 and 10-3		
	SWBAT calculate compound interest	Section 12-1 and 12-2		
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<b>Unit / Concept</b>	Unit 6: Installment Buying			
<b>Big Idea</b>	Due to the fact that some items are very expensive, it makes sense to buy them and pay them off over a given period of time.			
<b>Essential Q.</b>	How can you pay for the items needed to run your business?			
<b>Competencies</b>	<ul style="list-style-type: none"> <li>• Use of a credit card</li> <li>• Cost of installment buying</li> </ul>			
<b>Dates (estimates only)</b>	<b>Smart Objectives</b>	<b>Instructional Strategies and Activities</b>	<b>Standards</b>	<b>Vocabulary</b>
<b>4 Days</b>	SWBAT compute the cost of installment buying	Section 14-1	BCIT: 15.1.5.W BCIT: 15.6.8.H BCIT: 15.6.12.H	Credit card Installments
	SWBAT calculate the revolving charge of credit cards	Section 14-2		
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<b>Unit / Concept</b>	Unit 7: Financial Reports			
<b>Big Idea</b>	In order for a business to survive, its owner must be proficient at reading financial reports.			
<b>Essential Q.</b>	What information on a financial report can be used to grow a business?			
<b>Competencies</b>	<ul style="list-style-type: none"> <li>• Read a balance sheet</li> <li>• Read an income statement</li> <li>• Apply information from balance and income sheets to make decisions about your business.</li> </ul>			
<b>Dates (estimates only)</b>	<b>Smart Objectives</b>	<b>Instructional Strategies and Activities</b>	<b>Standard</b>	<b>Vocabulary</b>
<b>8 Days</b>	SWBAT read and interpret a balance sheet	Section 16-1	FCS: 11.1.9.B FCS: 11.1.12.B	Statement Balance sheet Income Trend Ratio
	SWBAT read and interpret an income statement over a specific period of time.	Section 16-2		
	SWABT apply trend and ratio analysis	Section 16-3		
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<b>Unit / Concept</b>	Unit 8: Depreciation			
<b>Big Idea</b>	Businesses need to understand that their goods may lose value.			
<b>Essential Q.</b>	How do products lose value?			
<b>Competencies</b>	<ul style="list-style-type: none"> <li>Use the Straight line, units of production Declining balance and modified accelerated cost recovery methods</li> </ul>			
<b>Dates (estimates only)</b>	<b>Smart Objectives</b>	<b>Instructional Strategies and Activities</b>	<b>Standard</b>	<b>Vocabulary</b>
<b>10 Days</b>	SWBAT apply the Straight line method to find depreciation	Section 17-1	BCIT: 15.1.8.H BCIT: 15.6.8.F	Depreciation Straight Line Method Units of Production Declining Balance Accelerated Cost Recovery Systems
	SWBAT use the Units of Production method to find depreciation	Section 17-2		
	SWBAT use the Declining Balance method to find depreciation	Section 17-3		
	SWBAT use the Modified Accelerated Cost Recovery System	Section 17-4		
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<b>Unit / Concept</b>	Unit 9: Inventory, Overhead and Taxes			
<b>Big Idea</b>	Businesses need to keep track of their product to ensure that they have enough to meet the demands of their customers			
<b>Essential Q.</b>	How do businesses keep track of their inventory?			
<b>Competencies</b>	<ul style="list-style-type: none"> <li>• Manage inventory</li> <li>• Apply sales tax</li> </ul>			
<b>Dates (estimates only)</b>	<b>Smart Objectives</b>	<b>Instructional Strategies and Activities</b>	<b>Standard</b>	<b>Vocabulary</b>
<b>10 Days</b>	SWBAT assign cost of ending inventory	Section 18-1	BCIT: 15.6.12.A BCIT: 15.6.12.H	Inventory Overhead Sales tax Excise Tax Retail Method Inventory Turnover
	SWBAT apply retail method, gross product method, inventory turnover and the distribution of overhead	Section 18-2		
	SWBAT calculate sales and excise tax	Section 19-1		
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<b>Unit / Concept</b>	Unit 10: Business Stats			
<b>Big Idea</b>	An understanding of statistics will enable a business owner to make predictions based on previous data.			
<b>Essential Q.</b>	What data is useful when making predictions to grow your business.			
<b>Competencies</b>	<ul style="list-style-type: none"> <li>• Mean</li> <li>• Median</li> <li>• Mode</li> <li>• Range</li> <li>• Frequency graphs</li> </ul>			
<b>Dates (estimates only)</b>	<b>Smart Objectives</b>	<b>Instructional Strategies and Activities</b>	<b>Standards</b>	<b>Vocabulary</b>
<b>8 days</b>	SWBAT calculate the mean median and mode	Section 22-1	PA: CC.2.4.HS.B.1 CC.2.4.HS.B.3	Mean Median Mode Range Frequency distribution Frequency graph
	SWBAT Calculate the range	Section 22-3		
	SWBAT analyze frequency distributions and graphs	Section 22-2		
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<b>Unit / Concept</b>	Unit 11: Representations of Data			
<b>Big Idea</b>	Programs such as Excel/Google Slides and PowerPoint/Google Slides are important tools to represent data and convey ideas in a business environment.			
<b>Essential Q.</b>	How do you represent data in Excel/Google Sheets? How do you use functions in Excel/Google Sheets? How do you create a presentation in PowerPoint/Google Slides How can you show the data found in Excel/Google Sheets with PowerPoint/Google Slides			
<b>Competencies</b>	<ul style="list-style-type: none"> <li>Finding and recording data</li> <li>Create formulas in Excel/Google Sheets to gain additional information from the data</li> <li>Apply information acquired from Excel/Google Sheets and present it in PowerPoint/Google Slides</li> </ul>			
<b>Dates (estimates only)</b>	<b>Smart Objectives</b>	<b>Instructional Strategies and Activities</b>	<b>Standards</b>	<b>Vocabulary</b>
<b>10 Days</b>	SWBAT collect data and represent it in a spreadsheet	Overview of Google sheets. How to make tables and track data.	PA: CC.2.4.HS.B.1 CC.2.4.HS.B.3	Google Sheets Google Slides Bar Graph Line Graph Pie Chart
	SWBAT create formulas in Google Sheets			
	SWBAT create a presentation using Google Slides			
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<b>Unit / Concept</b>	Unit 12: School Store			
<b>Big Idea</b>	Experience is one of the greatest methods of learning and retaining information. By having students operate a school store, they will gain valuable experience if they were to go on and own their own business..			
<b>Essential Q.</b>	What skills are required to own and operate a business			
<b>Competencies</b>	<ul style="list-style-type: none"> <li>• Scheduling</li> <li>• Pricing</li> <li>• Inventory</li> <li>• Management</li> </ul>			
<b>Dates (estimates only)</b>	<b>Smart Objectives</b>	<b>Instructional Strategies and Activities</b>	<b>Standards</b>	<b>Vocabulary</b>
<b>Ongoing</b>	SWBAT operate a school store	Students run the store Possible call in orders to be delivered	FCS: 11.2.6.A BCIT: 15.6.5.B BCIT: 15.9.5.E	Inventory Profit Revenue Expenses
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