



**Scope and Sequence: Math I with Financial Applications 2023-24**

**ANYTHING UNDERLINED IS A LINK!**

[Assessment List](#)

**MAPS NEEDED TO CREATE GRADE LEVEL TRACKERS**

**iMath1\_CMap**

[Secondary Assessment Calendar](#)

**What Students Learn in Math I with Financial Applications**

Integrated Math I begins with the most important topic in high school math: the study of functions. Students define functions and learn notation to describe them. Students develop vocabulary to describe key features of functions and relate patterns to tables, graphs, equations and scenarios used to represent them. Ideas about linear functions from 8<sup>th</sup> grade are built upon as students extend patterns, identify rates of change and fit equations to data. Students then compare and contrast a new type of function, exponential, with the more familiar linear functions. Students will understand linear and exponential growth from scenarios, patterns, tables, graphs and equations. They will also understand how transformations affect the graph and equation of both types of functions. In the second semester, students continue their work from prior grades solving one variable linear equations, justifying the steps in the process and then learn to solve linear inequalities. Students then combine their work with solving and graphing linear equations to learn about systems of linear equations. The year will end with a study of real world data to determine what type of function best models the data and analyzing the fit of the data to make predictions about the data in our study in statistics.

To account for unfinished learning and ensure students maintain the learning from the prior grade, one day a week will be dedicated to “keeping skills alive” during this year.

Unit Numbers and Titles		Time	Keeping Skills Alive	Overview of Depth of Mastery	
<b>S</b> <b>e</b> <b>m</b> <b>1</b>  1 7 w e e k s	<b>Required Diagnostic:</b> <u><a href="#">i-Ready (Aug 28 - Sept 22)</a></u>		1 day/week integers, exponents, distributive property, solving 1 and 2-step equations	<b>Math I students should <u>master</u>:</b> <ul style="list-style-type: none"> <li>• Solving one variable linear equations.</li> <li>• Linear functions- relating scenarios, tables, graphs and equations with slope-intercept form.</li> <li>• Linear vs. Exponential Functions, including identifying key features, graphing, and modeling.</li> <li>• Systems of linear equations including solving by Graphing, Substitution &amp; Elimination</li> </ul>	
	Introductory Week + <u><a href="#">Financial Algebra Unit 1: Income</a></u>				3 weeks
	1. <u><a href="#">Introduction to Functions</a></u>				3 weeks
	2. <u><a href="#">Linear vs Exponential Functions with Financial applications</a></u>				7-8 weeks
	<b>Required Benchmark #1</b> <u><a href="#">Student copy MasteryConnect (Dec 4-Dec 15)</a></u> <b>Sem1_iMath1</b>				
3. <u><a href="#">Statistics (bivariate data)</a></u>		3 weeks			
<b>S</b> <b>E</b> <b>M</b> <b>2</b>  21 w e e k	<b>Required Diagnostic:</b> <u><a href="#">i-Ready (Jan 8- Feb 2)</a></u>		linear functions; linear vs. exponential functions; solving multi-step equations;	<b>Math I students <u>work towards</u></b>  <b><u>fluency in:</u></b> <ul style="list-style-type: none"> <li>• Assessing the fit of a function to data.</li> <li>• Modeling a relationship between quantities using functions</li> <li>• Function notation.</li> </ul> <b>Math I students are <u>introduced to:</u></b> <ul style="list-style-type: none"> <li>• Systems of linear inequalities</li> </ul>	
	4. <u><a href="#">Solving Multi-step linear Equations &amp; Inequalities (absolute value*)</a></u>				3.5 weeks
	<u><a href="#">Financial Algebra Unit 2: Living/Spending</a></u>				2 weeks

5	5. <a href="#">Systems of Linear Equations &amp; Inequalities</a>	5 weeks		<ul style="list-style-type: none"> <li>Solving single-variable linear inequalities</li> <li>Transformations of functions</li> <li>Congruence defined by transformations, including triangle congruence conditions.</li> <li>Analyzing univariate data and scatter plots with correlation in Statistics.</li> <li><del>Arithmetic and Geometric Sequences in explicit and recursive notation.</del></li> <li>Graphing linear Inequalities, solving systems of linear inequalities.</li> </ul>	
	<a href="#">Financial Algebra Unit 3: Savings and Checking Accounts</a>	7 days			
	6. <a href="#">Transformations</a>	1-2 wks			
	<b>Required Benchmark #2</b> <i>in MasteryConnect (April 8-April 19)</i> <b>Sem2_iMath1</b>				
	7. <a href="#">Triangle Congruence through Rigid Motion</a>	2 weeks			
	<b>Required Diagnostic:</b> <a href="#">i-Ready</a> (May 1 - June 11)				
	8. <a href="#">Arithmetic and Geometric Sequences</a>	1-2 wks			