AMDM Pacing Guide 2020 - 2021		
Days	Unit	Georgia Standards of Excellence
22	Unit 1: Aspect Ratios	**MAMDM.N.1 Students will extend the understanding of proportional reasoning, ratios, rates, and percents by applying them to various settings to include business, media, and consumerism.** a. Use proportional reasoning to solve problems involving ratios. b. Understand and use averages, weighted averages, and indices. c. Solve problems involving large quantities that are not easily measured. d. Understand how identification numbers, such as UPCs, are created and verified.
23	Unit 2: Probability	**MAMDM.D.1 Students will determine probability and expected value to inform everyday decision making.** a. Determine conditional probabilities and probabilities of compound events to make decisions in problem situations. b. Use probabilities to make and justify decisions about risks in everyday life. c. Calculate expected value to analyze mathematical fairness, payoff, and risk. **MAMDM.A.2 Students will use a variety of network models to organize data in quantitative situations, make informed decisions, and solve problems.** a. Solve problems represented by a vertex-edge graph, and find critical paths, Euler paths, and minimal spanning trees. b. Construct, analyze, and interpret flow charts to develop an algorithm to describe processes such as quality control procedures. c. Investigate the scheduling of projects using PERT. d. Consider problems that can be resolved by coloring graphs.

20	Unit 3: Statistics	**MAMDM.D.2. Students will build the skills and vocabulary necessary to analyze and critique reported statistical information, summaries, and graphical displays.** **MAMDM.D.3 Students will apply statistical methods to design, conduct, and analyze statistical studies.** **MAMDM.D.4 Students will use functions to model problem situations in both discrete and continuous relationships.** a. Determine whether a problem situation involving two quantities is best modeled by a discrete (pattern identification, population growth, compound interest) or continuous (medication dosage, climate change, bone decay) relationship. b. Use linear, exponential, logistic, piecewise and sine functions to construct a model.
24	Unit 4: Finances	**MAMDM.A.3 Students will create and analyze mathematical models to make decisions related to earning, investing, spending, and borrowing money.** a. Use exponential functions to model change in a variety of financial situations. b. Determine, represent, and analyze mathematical models for income, expenditures, and various types of loans and investments.
31	Unit 5: Investments	**MAMDM.A.3 Students will create and analyze mathematical models to make decisions related to earning, investing, spending, and borrowing money.** a. Use exponential functions to model change in a variety of financial situations. b. Determine, represent, and analyze mathematical models for income, expenditures, and various types of loans and investments.
15	Unit 6: Trigonometry	Students apply tools to model geometric situations and solve problems. Students extend their knowledge of right triangle trigonometry. **MAMDM.G.1 Students will create and use two- and three-dimensional representations of authentic situations.** **MAMDM.G.2 Students will solve geometric problems involving inaccessible distances using basic trigonometric principles, including the Law of Sines and the Law of Cosines.**

| 28 | Unit 7: Algebra | **MAMDM.A.1 Students will use vectors and matrices to organize and describe problem situations.**
a. Represent situations and solve problems using vectors in areas such as transportation, computer graphics, and the physics of force and motion.
b. Represent geometric transformations and solve problems using matrices in fields such as computer animations. |