

# Advanced Topics in Mathematics ([1298310](#)) Scope and Sequence 2020-21

This course has 47 **MAFS.912** standards.

**Green** standards are non-repeating standards.

**Blue** standards are standards split between two units. (i.e. linear/exponential or quadratic/exponential).

**Purple** standards are repeated **Building & Interpreting Functions** standards.

Unit	Standards	Length of Time
Unit 1 Linear Functions & Arithmetic Sequences	<a href="#">F-BF.1.2 (arithmetic)</a> <a href="#">F-BF.1.1</a> , <a href="#">F-BF.2.3</a> , <a href="#">F-BF.2.4</a> , <a href="#">F-IF.3.7 (a)</a> , <a href="#">F-IF.3.9</a>	2 weeks
Unit 2 Quadratic and Polynomial Functions	<a href="#">F-IF.3.8 (a)</a> , <a href="#">N-CN.1.3</a> , <a href="#">N-CN.3.7</a> , <a href="#">N-CN.3.8</a> , <a href="#">N-CN.3.9</a> <a href="#">F-BF.1.1</a> , <a href="#">F-BF.2.3</a> , <a href="#">F-BF.2.4</a> , <a href="#">F-IF.3.7 (a,c)</a> , <a href="#">F-IF.3.9</a>	4 weeks
Unit 3 Exponential and Logarithmic Functions, & Geometric Sequences	<a href="#">F-BF.1.2 (geometric)</a> , <a href="#">F-IF.3.8 (b)</a> , <a href="#">F-BF.2.5</a> <a href="#">F-BF.1.1</a> , <a href="#">F-BF.2.3</a> , <a href="#">F-BF.2.4</a> , <a href="#">F-IF.3.7 (e)</a> , <a href="#">F-IF.3.9</a>	4 weeks
Unit 4 Rational, Radical, and Piecewise-Defined Functions	<a href="#">F-BF.1.1</a> , <a href="#">F-BF.2.3</a> , <a href="#">F-BF.2.4</a> , <a href="#">F-IF.3.7 (b,d)</a> , <a href="#">F-IF.3.9</a>	3 weeks
Unit 5 Trigonometric Functions	<a href="#">F-TF.1.3</a> , <a href="#">F-TF.1.4</a> , <a href="#">F-TF.2.5</a> , <a href="#">F-TF.2.6</a> , <a href="#">F-TF.2.7</a> , <a href="#">F-BF.1.1</a> , <a href="#">F-BF.2.3</a> , <a href="#">F-BF.2.4</a> , <a href="#">F-IF.3.7 (e)</a> , <a href="#">F-IF.3.9</a>	5 weeks
Unit 6 Trigonometric Identities	<a href="#">F-TF.3.8</a> , <a href="#">F-TF.3.9</a>	4 weeks
Unit 7 Polar Coordinates and Complex Numbers	<a href="#">N-CN.2.4</a> , <a href="#">N-CN.2.5</a> , <a href="#">N-CN.2.6</a>	3 weeks
Unit 8 Matrix Operations and Applications (Systems)	<a href="#">A-REI.3.8</a> , <a href="#">A-REI.3.9</a> , <a href="#">N-VM.3.6</a> , <a href="#">N-VM.3.7</a> , <a href="#">N-VM.3.8</a> , <a href="#">N-VM.3.9</a> , <a href="#">N-VM.3.10</a> , <a href="#">N-VM.3.11</a> , <a href="#">N-VM.3.12</a>	3 weeks
Unit 9 Volume	<a href="#">G-GMD.1.1</a> , <a href="#">G-GMD.1.2</a>	2 weeks
Unit 10 Conics	<a href="#">G-GPE.1.1</a> , <a href="#">G-GPE.1.2</a> , <a href="#">G-GPE.1.3</a>	3 weeks
Unit 11 Probability	<a href="#">S-CP.2.6</a> , <a href="#">S-CP.2.7</a> , <a href="#">S-CP.2.8</a> , <a href="#">S-CP.2.9</a> , <a href="#">S-MD.1.1</a> , <a href="#">S-MD.1.2</a> , <a href="#">S-MD.1.3</a> , <a href="#">S-MD.1.4</a> , <a href="#">S-MD.2.5</a> , <a href="#">S-MD.2.6</a> , <a href="#">S-MD.2.7</a>	4 weeks
End-of-Term Assessment window – May 24 <sup>th</sup> - May 28 <sup>th</sup>		