

Course Outline for MCF3M

Unit 1: Algebraic Skills

Approx. # of periods: 12

# periods	Topics	Practice Questions
1	2.1 Quadratic Expressions	
1	2.2 Common Factoring	
1	2.3 Factoring Quadratic Expressions I	
2	2.4 Factoring Quadratic Expressions II	
1	2.5 Factoring Quadratic Expressions III	
1	7.2 Laws of Exponents	
1	7.3 Integer Exponents	
2	7.4 Rational Exponents	
1	Review	
1	Test	

Unit 2: Functions

Approx. # periods: 11

# periods	Topics	Practice Questions
2	1.1 Functions	
1	1.2 Rates of Change	
1	1.3 Function Notation	
3	1.4-1.6 Graphing Transformations of Functions	
2	1.7 Domain and Range	
1	Review	
1	Test	

Unit 3: Quadratic Functions – Standard and Factored Forms

Approx. # periods: 5

# periods	Topics	Practice Questions
1	3.2 Relating Standard and Factored Form	
2	3.4 Solving Equations by Factoring	
2	3.5 Solving Problems	

Unit 4: Quadratic Functions – Standard and Vertex Forms

Approx. # periods: 9

# periods	Topics	Practice Questions
1	4.1 Vertex Form	
2	4.2 Completing the Square	
1	4.3 Quadratic Formula	
1	4.4 Investigating the Nature of the Roots	
2	4.5 Solving Problems	
1	Review	
1	Test	

Unit 5: Trigonometry and Acute Triangles

Approx. # periods: 8

Date	Topics	Practice Questions
1	5.1 Primary Trig Ratios	
1	5.2 Solving Problems with Right Triangles	
1	5.3 Sine Law	
2	5.4 Cosine Law	
1	5.5 Solving Problems	
1	Review	
1	Test	

Unit 6: Sinusoidal Functions

Approx. # periods: 6

Date	Topics	Practice Questions
2	6.2-6.3 Periodic Behaviour and Sine Function	
1	6.4 Comparing Sinusoidal Functions	
1	6.5 Transformations of Sine, shifts	
1	6.6 Transformations of Sine, stretches	
1	Evaluation	

Unit 7: Exponential Function

Approx. # periods: 5

Date	Topics	Practice Questions
1	7.5 Exploring the Properties of Exponential Functions	
1	Graphing Exponential Functions	
1	7.6 Solving Problems Involving Exponential Growth	
1	7.7 Problems Involving Exponential Decay	

1	Evaluation	
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Unit 8: Solving Financial Problems

Approx. # periods: 10

Date	Topics	Practice Questions
1	8.1 Simple Interest	
1	8.2 Compound Interest – Future Value	
2	8.3 Compound Interest – Present Value	
1	8.4 Solving Financial Problems	
1	8.5 Regular Annuities – Future Value	
2	8.6 Regular Annuities – Present Value	
1	Review	
1	Test	

Total periods: 66