



Long Term Plan

Prepared by: Br. Hifzurrahman

Course: MCR3U (Functions)		Teacher: Br. Hifzurrahman
		Course Textbook: Functions 11 (Nelson)
Chapter 1: Patterns of Growth (Sequences)		
Periods	Section	Homework
1	1.1 Exploring Patterns and Sequences	Pg. 21-25 # 1-5 (a,c), 7(a,c), 10, 11, 13-16
1	1.3 Sequences and Recursive Formula	Pg. 32-34 #1-4 (a,c), 6,7,15,19
1	1.6 Arithmetic Sequence	Pg.47 #3 (a,f), 4, 5, 10(a,e), 11(e,f), 12,13, 17(e,f)
1	1.7 Geometric Sequence	Pg. 57 #1, 2-3(a,c), 4, 6, 7a, 10, 13, 20a
1	1.8 Compound Interest: Amount and Present Value	Pg. 70 #1(a,c,e), 4 (a,c),5 (a,c,e),11, 14, 15 , 23
1	1.9 Rational Exponents	Pg 79 #4, 6-7(odd), 8, 16-17, 20, 22
1	1.10 Simplifying Expressions Involving Exponents	Pg 86 #6odd, 11-12(odd), 13-16 (odd), 18(a,c), 19a
1	1.11 Solving Exponential Equations	Pg 94 #1, 4odd, 6odd, 9-10 (odd), 13, 23a, 24a
2	Chapter Review	Pg 98-103#1-51 Pg 104 #1-12
1	Test 1	
Chapter 2: Series and Financial Applications		
1	2.1 Arithmetic Series	pg 114 #1odd,3,4-6(odd) Optional #9, 11, 15, 18, 23, 24
1	2.3 Geometric Sequence	Pg 123 # 3(a,c,e),4,5(a,c,e), 6,10,18
1	2.7 Future Value	Pg.151 #3,4,6, 8,13
1	2.8 Present Value	Pg 163 #3-4(a,c), 5, 6, 11, 13
1	2.10 Equivalent Rates & General Annuities	Pg.179 #3(a,c,e,g),4-5(a,c,e), 20 Pg 191 #2,6
1	Chapter Review	Pg 203-203 All questions Pg 197-202 #1-36
1	Test 2	
Chapter 3: Introducing Functions		
1	Getting Ready	Pg211 # 1-5(odd),6-7, Pg 212 #1-6
1	3.2 Functions: Concept and Notation	Pg 234-239 #2, 4-8, 13, 23a
1	Domain & Range	Handouts
1	3.3 Solving Inequalities	Pg 245 #1-5(odd), 6, 11(b,c)
1	3.4 The Inverse Function	pg 255 # 1, 7(abcno), 9(a-d), 11-13
1	3.6 Investigating Properties of Inverse Functions	pg 273 #1, 2, 3-4(odd), 6-8
2	3.7 Transformations & Functions Notations	Pg 287#3(a,b,c), 7, 8, 10, 15 Day 1 Pg 289 #15, 16 Day 2 (complete 7 and 8 if not completed)
1	Chapter Review	Pg 293-296 1-12, #18-21,
1	Test 3	

Periods	Section	Homework
Chapter 4: Quadratic Functions and Rational Expressions		
1	4.1 Completing Square	pg 306 # 1-3(odd), 4, 5(a,c,k), 6(a,c,e), 7,8, 12
1	4.2 Max and Min values of Quadratic Functions	pg 314 #1-5 (odd), 8, 9, 10
1	4.3 Zeros of Quadratic Functions	pg 325 #2-4, 7, 9
2	4.4 Introducing Complex Numbers	pg 331 #1, 2, 4-6 (for 6, use QF) pg 332 #3odd, 7odd, 9-10(odd), 13, 14, 21
1	4.5 Adding, Subtracting, & Multiplying complex Numbers	pg 336 #1-3(odd), 4, 5, 6(a,c
1	4.6 Reciprocal Functions	pg 345 #3, 5,11, 12, 13
1	4.10 Dividing Complex Numbers	Pg 362 #3odd, 4, 5, 13, 16 Pg 369#3-4 (odd)
1	4.8 Simplifying Rational Expressions	Pg 353 #1odd, 2, 3, 4odd, 9odd, 10(a,c)
1	4.9 Multiplying/Dividing Rational Expressions	Pg 359 #2(a,c,e), 5(odd), 7-9(odd), 10b
1	4.11 Adding and Subtracting Rational Expressions	Pg 370 #5-6(odd), 9, 10, 11(a,c)
1	Chapter Review	
1	Test 4	
Chapter 5: Modelling Periodic Functions		
1	Review of prerequisite skills (getting ready)	
1	5.1 Periodic Phenomena	Pg413 #1-4, 10
1	5.2 Understanding Angles	pg 422 #1-6 (a,c,e), 7, 8-9(odd), 11-13
1	5.3 Trigonometric Functions	pg 433 #1-3, 4, 5-7(odd)
1	5.4 Radian Measure	Pg 435 #9-11, 12 Pg 442 #1-3, 5, 10, 11
2	5.6 Investigating Transformations	pg 455 #1-6 (day 1) pg 456 #7, 8, 9, 11 (day 2)
1	5.7 Modelling Periodic Phenomena	Pg 463 #1, 2, 6, 8, 9, 20
1	5.8 Solving Linear Trigonometric Equations	Pg 474 #3, 6ac, 8ac, 15, 17-18(odd)
1	Chapter Review	
1	Test	
Chapter 6: Extending Skills with Trigonometry		
1	6.1 Extending Trig. Skills with Oblique Triangles	
1	6.2 Solving Trig. Problems in 2 & 3 Dimensions	
1	6.3 Using Special Triangles to Determine Exact Values	
1	6.4 Investigating Identical Expressions	
1	6.5 Trigonometric Identities	
1	6.6 Solving Quadratic Trigonometric Equations	
1	Chapter Review	
1	Test	

Note: 3 lessons will be taught on Exponential functions and the application of exponential functions (half-life questions, doubling period questions, exponential growth/decay)