

MHF4U Homework Questions

SECTION	TOPIC	QUESTIONS
1.1	Functions	p.11-13#1,2abdf,3,4abcef,6-9,11,12
1.2	Absolute Value	p.16#1,2,3ab,4ab,5-8
1.3	Properties of Graphs & Functions	p.23-25#1-4,5acdf,7,8ab,9-11,15
Mid-Chapter Review	Mid-Chapter Review	p.28#1,2,3acd,4,5ab,6-9
1.4	Sketching Graphs of Functions	p.35-37#1-3,5bdf,7-11,13,15
1.6	Piecewise Functions	p.51-53#1abde,2-9,11,12,14
Chapter Review	Chapter Review	p.60-61#1-17(don't graph 7c)
2.1	Average Rate of Change	p.76-78#1ace,2-10,13
2.2	Instantaneous Rates of Change (Tables & Equations)	p.85-87#1-3,4ac,5-10
2.3	Instantaneous Rates of Change (Graphs)	p.91-92#1(use a chart to determine slope of tangent at given x-value), #3a (Set A - $f(x)$, Set B - $h(x)$, Set C - $g(x)$) (same instructions as #1), 4,5
Mid-Chapter Review	Mid-Chapter Review	p.95#1-4,6-8,9 (make chart)
2.4	Using Rates of Change to Create Graphical Models	p.103-106#1-5,7,8,10,11
2.5	Solving Problems Involving Rates of Change	p.111-113#1-4,5ab,6,10,11,12 (just prove $x=5$ is a max)
Chapter Review	Chapter Review	p.116-117#1-13 (do #7 w/o graph calc)
3.1	Exploring Polynomial Functions	p.127-128#1-5
3.2	Characteristics of Polynomial Functions	p.136-138#1-13,15
3.3	Characteristics of	p.146-148#1-4,6-8,9ab,10,12,13,14

	Polynomial Functions in Factored Form	(just determine the value of k)
3.4	Transformations of Cubic and Quartic Functions	p.155-158#1-11
Mid-Chapter Review	Mid-Chapter Review	p.161#1-9
3.5	Dividing Polynomials	p.169-170#5-11,14,15
3.6	Factoring Polynomials	p.170#12,13 p.176-177#2-10,12-14
3.7	Factoring a Sum or Difference of Cubes	p.182#2-9
Chapter Review	Chapter Review	p.184-185#1-18
4.1	Solving Polynomial Equations	p.204-206#2,4-6,7bcde,9cd,10,11abd,13abcd,15,16
4.2	Solving Linear Inequalities	p.213-215#2,3,5-7,8a,9,10,12,13,15,16
Mid-Chapter Review	Mid-Chapter Review	p.218#1-8
4.3	Solving Polynomial Inequalities	p.225-228#2,3,5,6df,7-10,12-15
4.4	Rates of Change in Polynomial Functions	p.235-237#1,3,5-9,10bc,11,13,14
Chapter Review	Chapter Review	p.240-241#1-4,6-11,14-17
5.1	Graphs of Reciprocal Functions	p.254-257#1-5,8ac,9bd,10-12
5.2	Quotients of Polynomial Functions	p.262#1-3
5.3	Graphs of Rational Functions of the Form $f(x) = \frac{ax+b}{cx+d}$	p.272-274#1-3 (just analyze and graph #2,3),5,6abc,9,10
Mid-Chapter Review	Mid-Chapter Review	p.277#1,2,4-9
5.4	Solving Rational Equations	p.285-287#1,5,6,8ab,9-12
5.5	Solving Ration Inequalities	p.295-297#1,2,4,5,7,9-11,12a
5.6	Rates of Change in Rational Functions	p.303-305#4,6-9,12
Chapter Review	Chapter Review	p.308-309#1,3-12,13ab,15

6.1	Radian Measure	p.320-322#1-9,11,13ab,14
6.2	Radian Measure & Angles on the Cartesian Plane	p.330-332#1,2,5,7,9,10,13,15,16
6.2(cont.)	The Unit Circle	p.330-332#3,4,6,8,14,17 Handout Questions
6.3	Graphs of the Primary Trigonometric Functions	Graph & List the Properties
6.4	Transformations of Trigonometric Functions	p.343-346#1,4-10,12-15
Mid-Chapter Review	Mid-Chapter Review	p.349#1-7,8abcd,9
6.5	Graphs of the Reciprocal Trigonometric Functions	p.353#5,6,7ac
6.6	Modelling with Trigonometric Functions	p.360-362#1,2,4-7,10-12
6.7	Rates of Change in Trigonometric Functions	p.369-373#1-3,7,9ab,11-13
Chapter Review	Chapter Review	p.373-377#1-19
7.1	Equivalent Trigonometric Functions	p.392-393#1,3,4a,5,7
7.2	Compound Angle Formulae	p.400-401#1-6,8-13
7.3	Double Angle Formulae	p.407-408#1-12,13abd,15 (describe, don't graph)
Mid-Chapter Review	Mid-Chapter Review	p.411#1-6,8-12
7.4	Trigonometric Identities	p.417-418#1,4,5,7(prove = $\cos 2x$), 8-10
7.4 (cont.)		p.418#11,13(prove = $\tan x$)
7.5	Solving Linear Trigonometric Equations	p.426-428#1-10,11,14(w/o graphing)
7.6	Solving Quadratic Trigonometric Equations	p.435-437#1,4-10(not 8d),12-14,19
Chapter Review	Chapter Review	p.440#1-13
8.1	The Logarithmic Function	p.451#1-11
8.2	Transformations of Logarithmic Functions	p.457-458#1-4,5abdf,7-10
8.3	Evaluating Logarithms	p.466-468#1-6,8-11,13-15,18,19
8.4	Laws of Logarithms	p.475-476#1-13,15,17

Mid-Chapter Review	Mid-Chapter Review	p.479#1-13 (for #9 calculate don't estimate)
8.5	Solving Exponential Equations	p.485-486#1-13 p.467#12
8.6	Solving Logarithmic Equations	p.491-492#1-10,12-15,17,19
8.7	Solving Problems with Exponential & Logarithmic Functions	p.499-501#1-8,10,13-15
Chapter Review	Chapter Review	p.510-511#1-18 (not 12a), 22, (for #6 calculate don't estimate)
9.2	Combining Two Functions: Sums & Differences	p.528-530#1bcf,2,3,5(graph f+g), 6, 7,9ac (do by hand),10,12,15
9.3/9.4	Combining Two Functions: Products & Quotients	p.537-539#1bde,3,4bcef,5bcef (domain only), 8ab,9,10ab,11-14
9.5	Composition of Functions	p.552-553#1-4,5ae,6abce (domain only), 7-11,14
9.7	Modelling with Functions	p.543#Q&A Mid-Chapter Review p.544#1-5, 6ac, 7, 8
Chapter Review	Chapter Review	p.576-577#1-6,8-10,14