## Homework Assignments by section for Pre-Calculus I MTH-124 from *Precalculus: A Unit Circle Approach* by Ratti, 3<sup>rd</sup> edition

Section		Recommended problems ( <b>odds</b> unless stated otherwise)
3.1	Exponential Functions	5, 8, 9-25, 33-36 all, 37, 43, 47-57, 63-81, 85, 87
3.2	Logarithmic Functions	1-4 all, 9-69, 72, 81, 89
3.3	Rules of Logarithms	1-8 all, 15, 17, 21-53, 67, 71, 73-5, 89, 99, 101, 111,
		117, 121, 125
3.4	Equations	7-51, 61-79, 101, 105
4.1	Angles	9-17, 23, 29-45, 49, 53-67, 71-77, 91-95, 111
4.2	The Unit Circle	9-13, 21-125, 129, 139-147
4.3	Trig Functions of Angles	9-83, 87-97
4.4	Graphs of Sine and Cosine	29-53, 59-69
4.5	Graphs of Other Trig Functions	7, 13, 15, 31, 37-41, 45-55
4.6	Inverse Trig Functions	1-31, 37-93
5.1	Trig Identities	19, 21, 25-87, 93, 95
5.2	Sum and Difference Formulas	5, 7, 17-21, 29-39, 53-77, 97, 101, 103
5.3	Double and Half Angle Formulas	5-13, 25-47, 63-73, 77, 93, 103-109
5.4	Product to Sum & Sum to Product	29, 31, 37, 39, 53, 55, 83
5.5	Trig Equations	1, 5, 7-17, 35-71, 79-105, 113, 119, 123, 129
6.1	Right Triangle Trig	9-13, 33-43, 49-63, 67, 69, 75, 78
6.2	Law of Sines	9-25, 29, 33, 37-53, 59-63, 67, 69, 73, 75, 85-89, 99
6.3	Law of Cosines	9-23, 27, 31, 35, 47, 49, 55, 57, 59
6.4	Vectors	5, 17-77
6.5	The Dot Product	1-8 all, 9-65, 71, 73, 93, 95
6.6	Polar Coordinates	5, 6, 17-69
7.4	Matrices	7, 8, 9-15, 19-41, 45, 49, 55, 59, 63, 67, 71
7.5	Determinants	9, 13, 17, 23, 27, 31
7.6	Partial Fraction Decomposition	9-19, 23-63 every other odd
7.7	Matrix Algebra	4, 5, 7, 9-43, 59, 67
7.8	The Matrix Inverse	1-6 all, 9-13, 19, 21, 29, 31, 35-41, 49, 67
8.2	The Parabola	9-15, 17, 21, 25-29, 33, 41, 47, 49
8.3	The Ellipse	9, 13, 17, 21, 23, 27, 31, 41, 45, 47, 51-59, 63, 65, 69
8.4	The Hyperbola	9-15, 17, 21, 25, 29, 33, 37, 41, 43-53, 63-75
8.7	Parametric Equations	9, 11, 17-23, 29-33
9.1	Sequence and Series	8, 9-27 every other odd, 29-49, 59-67, 71, 75, 79-87
9.2	Arithmetic Sequences	9-19 every other odd, 23, 25, 33, 35, 39, 41, 45, 47, 49, 51, 55
9.3	Geometric Sequences	6, 8, 9-21, 29, 31, 35-41, 47, 49, 53, 55, 57, 67, 69, 73-77