

Math 1414 - College Algebra Required Problems

Also do the problems in the “**Vocabulary Check**” exercises in each required section

Prerequisite: A passing score of 250+ on the math portion of the THEA exam, passing the College Algebra Placement Exam, or passing MATH 1332, or MATH 90 with “C” or better.

Sec.	Title	Assigned Problems
P.2	Exponents and Radicals	1-22, 25-39(odd), 41-83(odd), 87-103(odd)
P.3	Polynomial and Special Products	1-51(odd), 55-81(odd), 93-105 (odd)
1.1	Graph of Equations	1- 33(odd), 49-67(odd)
1.4	Quadratic Equations	1-49(odd),59-81(odd), 91-106,109-117,121-129
1.5	Complex Numbers	1-85(odd), 93-96
1.6	Other Types of Equations	1-23(odd), 29-49(odd), 57-69(odd) 75-93(odd)
1.7	Linear Inequalities	1 -59 (odd) , 75-98, 99-105 (odd)
1.8	Other Types of Inequalities	1-29(odd), 37-41(odd) 55-63(odd), 67-71
TEST#1 OVER SECTIONS P.2, P.3, 1.1, 1.4 -1.8		
2.1	Linear Equations in Two Variables	1-83(odd), 89-117(odd)
2.2	Functions	1-44, 45-73 (odd), 79-81, 89-93
2.3	Analyzing Graph of Functions	1-23(odd), 31-37, 55-83(odd), 90, 98, 99
2.4	A Library of Parent Functions	1-8, 29-45 (odd), 53-65
2.5	Transformations of Functions	1-35(odd), 43-59 (odd)
2.6	Combinations of functions	1-45(odd), 47-50, 57-59, 63-67
2.7	Inverse Functions	1-31(odd), 39-61(odd), 80-82
3.1	Quadratic Functions	1-10, 13-23(odd), 65-67, 76-83
Test #2 over Sections 2.1 –2.7 and 3.1		
3.2	Polynomial Functions of Higher Degree	1-20, 27-40, 47-75(odd), 90
3.3	Polynomial and Synthetic Division	1, 2, 5-12, 19-31, 37-61(odd), 69-71
3.4	Zero of Polynomial Functions	1-26(odd), 37-70(odd), 79-103(odd), 105-108, 110
3.5	Mathematical Modeling	1, 2, 13-43(odd), 47-53(odd), 60, 62, 65
4.1	Rational Functions and Asymptotes	1-20, 25-28, 43,45
4.2	Graph of Rational Functions	1-26(odd), 47-57, 75, 76
4.4	Conics	1-10, 11-30 (odd), 35-49(odd), 61-75(odd), 95
4.5	Translation of Conics	1-29(odd), 33-49(odd), 55-69(odd), 91
Test #3 over Sections 3.2 – 3.5 and 4.1-4.2		
5.1	Exponential Function and their graphs	1-18(odd),45-63(odd), 65-67
5.2	Logarithmic Function and their graphs	1-59(odd), 65-72, 89, 90
5.3	Properties of Logarithms	1-79(odd), 81-83
5.4	Exponential and Logarithmic Equations	1-55(odd),75-101(odd), 109-115
5.5	Exponential and Logarithmic Models	1-6, 7-49(odd)
Test #4 over Section 5.1-5.5		
6.3	Multivariable linear systems	1-21(odd), 39-45, 55- 65(odd)
7.1	Matrices and System of Equations	1-25(odd), 51-56, 59-64, 85
7.2	Operation With Matrices	1-18(odd), 27-33(odd), 41-45, 59, 60, 62-64, 67
7.4	The Determinant of a Square Matrix	1-16(odd), 23-34(odd), 37-43, 61-65, 69, 75-78
7.5*	Applications of Matrices and Determinants*	1-7, 15-39(odd)
8.1	Sequences and Series	1-11, 23-26, 37-45, 51-77 (odd), 89, 90, 99-107
8.2	Arithmetic Sequences and Partial Sums	1-41(odd), 45-47(odd), 57-73(odd), 83-89(odd)
8.3	Geometric Sequences and Series	1-39(odd), 53-59, 73-89(odd), 101-105
Test#5 over 6.3, 7.1 - 7.5 and 8.1-8.3		
Comprehensive Final Exam.		