

KING FAHD UNIVERSITY OF PETROLEUM & MINERALS
College of Sciences, Prep-Year Math Program
SYLLABUS
MATH 001 (051)

Pre-Requisite	HIGH SCHOOL ALGEBRA
Textbook	College Algebra & Trigonometry by Aufmann /Barker/Nation, 5 th Edition, Houghton Mifflin, (2005)
Objectives	The students are expected: to comprehend the material of this course. to improve their computational skills in basic Algebra and Trigonometry to demonstrate their writing ability in Mathematics with logical steps. Please note that the medium of instruction will be strictly ENGLISH from the first day of classes.

Week #	Date	Text Sections	Topic	Homework Problems
1	Sep. 10 - 14	P-1	The Real Number System	1,5,8,12,14,22,26,36,38,44,50,56,66,76,82,105,126
2	Sep. 17-21	P-2	Integer and Rational Number Exponents	4,9,26,28,36,48,58,80,87,94,105,108
September 24 (National Holiday)				
3	Sep. 25-28	P-3	Polynomials	10,16,28,34,48,50,54,62,68,88
		P-4	Factoring	5,8,10,14,20,28,32,46,54,58,64,76,82,88
4	Oct. 1-5	P-5	Rational Expressions	6,8,10,14,22,32,36,38,44,61
		P-6	Complex Numbers	6,14,26,36,40,50,62,66
5	Oct. 8-12	1.1	Linear and Absolute Value Equations	4,14,20,22,28,32,42,44,64
		1.2	Formulas and Applications (Examples #1 and #3) and (table 1.2**) ONLY	5,10,17,18,20,22
6	Oct. 15-19	1.3	Quadratic Equations	2,10,20,26,32,40,42,52,56,57,82,86
7	Oct. 22-26	1.4	Other Types of Equations	2,8,17,18,26,28,38,40,52,54,56
		1.5	Inequalities	8,10,16,24,28,30,36,42,47,50,60,71,72,74,77
Id al-Fitr Vacation (Oct. 27- Nov. 11)				
8	Nov. 12-16	2.1	A Two-Dimensional Coordinate System and Graphs	2,8,12,18,24,28,29,48,56,58,63,70,76,88
9	Nov. 19-23	2.2	Introduction to Functions	5,10,16,18,26,38,42,43,55,64,82,84
10	Nov. 26-30	2.3	Linear Functions	10,14,26,30,34,38,40,48,52,74,76,90,93,97
		2.4	Quadratic Functions	8,18,24,30,34,44,46,60,76,78,82,86
11	Dec. 3-7	2.5	Properties of Graphs	14,18,20,21,29,30,32,38,42,48,52,58,62,66,70,86
		2.6	The Algebra of Functions	12,16,28,32,40,44,48,60,62,76,82,88
12	Dec. 10-14	3.1	The Remainder Theorem and the Factor Theorem	10,18,22,28,32,40,43,48,54,58,68,70,72
		3.2	Polynomial Functions of Higher Degree	4,7,14,22,26,30,32,36,40,44,46,62,70
13	Dec. 17-21	3.3	Zeros of Polynomial Functions	4,6,10,16,20,26,30,34,36,38,41,48,52,58,76,78
14	Dec. 24-28	3.4	The Fundamental Theorem of Algebra	4,12,18,28,34,38,40,44,46,50,52
		3.5	Graphs of Rational Functions and Their Applications	2,8,12,24,28,32,36,44,46,48,65
15	Dec. 31-Jan. 4	4.1	Inverse Functions	2,6,8,18,22,24,36,40,44,58,62,66,68
Id al-Adha Vacation (Jan. 5 - Jan. 20)				
16	Jan. 21	Review	Last Day of Classes	

Note # 1: A student will be awarded the GRADE "DN" after missing EIGHT classes without an OFFICIAL excuse. It is the responsibility of the student to keep the record of his absences. Students will have ONLY 6 days to submit their excuses to the prep-year affairs (1st warning: 3 absences; 2nd warning: 6 absences; "DN": 8 absences)

Note # 2: To check your warnings (WEEKLY), Homework Solutions, Exam Locations, and other Math announcements, Please visit Portable 3, Math Bulletin Board (beside PR-108), or www.kfupm.edu.sa/mathprep.

Note # 3: During the first week, exam week, and the final week , the CAL class will be Conducted as a regular class.

** : The students are asked to **memorize** the top 5 formulas of (table 1.2, page 91) and **understand** the bottom 5 formulas.

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CAL Syllabus

MATH 001 (Term 051)

Textbook: College Algebra with Trigonometry by Aufmann/ Barker / Nation, 5th ed., Houghton Mifflin, (2005)

Note: During the 2nd week of the classes, the class instructor will introduce the CAL software.

Section in the Textbook	Larson's CD Section	Section Exercises (in Larson's CD)	Tutorial Exercises (In Larson CD)
P.1	P.1	P.1 6,105,110, 25,54,61,64	P.1 1,11,12,14, 5,6,16
P.2	P.2	P.2 2,4,62	P.2 4,5,21,24,25
P.3	P.3	P.3 11,24,32,42,85,92	P.3 3,8,13
P.4	P.4	P.4 4,8,16,22,50,68,84,104	P.4 1,7,9,12,13
P.5	P.5	P.5 8,14,24,58,70	P.5 3,5,9,11,12
P.6	1.5	1.5 4,8,40,84	1.5 1,3,4,9,14
1.1	1.2	1.2 16,30,38,43,70	1.2 1,8,12
1.2	1.3	1.3 10,22,26	1.3 2,3,10,11
1.3	1.4	1.4 8,10,14,26,52,89	1.4 1,5,8,15,19
1.4	1.6	1.6 4,6,22,20,40,98	1.6 4,7,8,12,14
1.5	1.7& 1.8	1.7 28,52,74,82 1.8 16,61,66	1.7 6,8,10,12,13 1.8 3,4,6,7
2.1	P.7, 1.1	P.7 44,52,68 1.1 72,78	P.7 3,6,7 1.1 6,7
2.2	2.2	2.2 16,22,30,36,72	2.2 1,4,11
2.3	2.1	2.1 2,16,42,68,90	2.1 3,4,14
2.4	3.1	3.1 18,24,34,54,60	3.1 2,3,4,5
2.6	2.3, 2.4	2.3 2,14,60 2.4 26,52,66,84	2.3 1,3,4 2.4 2,4,5
3.1	3.3	3.3 22,26,46,56	3.3 3,4,5,7
3.2	3.2	3.2 16,18,56,68	3.2 1,3,6,9,10
3.3	3.4	3.4 10,30,32,46,56	3.4 1,3,4,9
3.4	3.5	3.5 4,16,42,52	3.5 5,6,9
3.5	4.1,4.2	4.1 8,12,14 4.2 16,18,19	4.1 1,2,3 4.2 2,5,7,9