

### Prince Sultan University Department of Mathematical Science SYLLABUS MATH 001 (Term 101)

Course	-	MATH 001
Title	:	Orientation Mathematics I
Textbook	:	Algebra and Trigonometry, Fourth Edition; Robert Blitzer; Prentice Hall
Objectives	:	The students are expected: to comprehend the material of this course, to improve
		their computational skills in basic algebra, and to demonstrate their writing ability in
		Mathematics with logical steps

Mathematics with logical steps. The medium of instruction will be strictly ENGLISH from the first day of classes.

Week #	Date	Text Sections	Торіс				
1	Sept. 25 – Sept. 29	P.1 P.2	Algebraic Expressions and Real Numbers Exponents				
2	Oct. 02 – Oct. 06	P.3 P.4	Radicals and Rational Exponents Polynomials				
3	Oct. 09 – Oct. 13	P.5	Factoring Polynomials				
4	Oct. 16 – Oct. 20	P.6 1.1	Rational Expressions Graphs				
5	Oct. 23 – Oct. 27	1.1 1.2	Graphs Linear Equations and Rational Equations				
6	Oct. 30 – Nov. 03	1.4 1.5	Complex Numbers Quadratic Equations				
7	Nov. 06 – Nov. 10	1.6 1.7 	Other Types of Equations Linear Inequalities and Absolute Value Inequalities Mid-term Exam. (P.1 – 1.6) on Mon. Nov. 08, 2010				
	Hajj Vacation (Nov. 11 – Nov. 21)						
8	Nov. 20 – Nov. 24	2.1	Basics of Functions and Their Graphs				
9	Nov. 27 – Dec. 01	2.2 2.3	More on Functions and Their Graphs Linear Functions and Slope				
	Dec. 01, 2010 Last day for dropping course(s) with grade of "W"						
10	Dec. 04 – Dec. 08	2.4 2.5	More on Slope Transformations of Functions				
11	Dec. 11 – Dec. 15	2.6 2.7	Combinations of Functions; Composite Functions Inverse Functions				
	Dec. 15, 2010 Last	day for withdra	wal from all courses with grade of "W"				
12	Dec. 18 – Dec. 22	2.8 3.1	Distance and Midpoint Formulas; Circles Quadratic Functions				
13	Dec. 25 – Dec. 29	3.2	Polynomial Functions and Their Graphs				
14	Jan. 01 – Jan. 05	3.3 3.4	Dividing Polyn.; Remainder & Factor Theorems Zeros of Polynomial Functions				
15	Jan. 08 – Jan. 12	3.5	Rational Functions and Their Graphs				
16	Jan. 15 – Jan. 18	3.6 	Polynomial and Rational Inequalities Review				
	Final Exams (Jan. 22 – Feb. 02 )						

Omitted Objectives (Topics)					
Section	Objectives	Section	Objectives	Section	Objectives
P.2	9	1.6	6	3.1	4
1.1	5	2.1	7	3.4	1,2,3 & 5
1.3	ALL	2.3	7	3.5	7 & 8
1.5	7	2.6	5	3.6	3



# Prince Sultan University Department of Mathematical Sciences PRACTICE PROBLEMS MATH 001 (Term 101) <u>Blitzer, Fourth Edition</u>

SECTION	PAGE	PROBLEMS
P.1	15	11, 13, 15, 25, 31, 41, 47, 55, 59, 63, 69, 73, 89, 93, 95 , <b>153,155</b>
P.2	31	5, 7, 13, 17, 19, 21, 25, 29, 33, 37, 39, 41, 43, 47, 51, 55, 57, 61, 63, <b>109 , 111</b>
P.3	46	11, 15, 17, 21, 25, 29, 31, 35, 39, 41, 43, 49, 53, 59, 63, 65, 71, 73, 77, 79, 87, 89, 91, 93, 97, 99, 105, 107, <b>111, 113</b>
P.4	58	3, 7, 11, 13, 17, 25, 29, 31, 35, 37, 43, 47, 53, 57, 61, 65, 67, 71, 75, 77, 81, <b>83, 87, 89</b>
P.5	71	5, 9, 13, 15, 19, 25, 29, 37, 41, 47, 51, 55, 59, 63, 67, 71, 75, 81, 85, 87, 89, 95, 99, 101, <b>103, 107, 111, 113</b>
P.6	82	3 , 5, 9, 11, 15, 19, 21, 25, 29, 31, 35, 39, 41, 45, 49, 51, 53, 57, 59, 63, 71, <b>73</b>
Review	97	1, 7, 8, 11, 21, 25, 29, 31, 42, 45, 47, 51, 55, 61, 67, 69, 73, 77, 79, 81, 87, 93, 101, 103, 107, 113, 117, 119
1.1	91	13, 17, 21, 23, 25, 41, 43, 45
1.2	112	3, 9, 11, 23, 25, 33, 37, 43, 45, 49, 55, 59, 63, 67, 69, 71, 77, 79, <b>87, 91, 95</b>
1.4	135	3, 5, 11, 15, 19, 21, 27, 31, 35, 39, 41, <b>47, 51</b>
1.5	152	2, 7, 9, 13, 17, 23, 29, 37, 51, 57, 63, 67, 71, 77, 81, 85, 91, 97, 103, 107, <b>127, 129</b>
1.6	168	3, 7, 9, 13, 17, 27, 29, 31, 33, 35, 39, 41, 49, 57, 59, 63, 65, 69, 73, 87, <b>95, 97, 133</b>
1.7	185	3, 11, 21, 29, 33, 39, 41, 45, 49, 55, 57, 63, 73, 77, 79, 85, 91

Review	191	1, 7, 19, 27, 33, 55, 57, 59, 63, 67, 69, 71, 75, 87, 89, 91, 93, 95, 99, 115, 117, 119, 121
2.1	210	5, 9, 11, 13, 17, 21, 31, 33, 35, 41, 53, 59, 61, 67, 69, 79, 83, 87, <b>95, 97</b>
2.2	223	3, 9, 19, 23, 27, 29, 37, 39, 41, 47, 51, 55, 57, 59, 61
2.3	239	3, 7, 13, 19, 23, 27, 29, 35, 37, 45, 59, 63, 71, <b>79, 81, 107</b>
2.4	250	1, 3, 5, 7, 9, 11, 13, 15, <b>21, 23, 45</b>
2.5	266	5, 9, 21, 25, 31, 49, 57, 63, 71, 79, 93, 103
2.6	279	7, 11, 19, 23, 27, 35, 41, 45, 51, 57, 61, 67, 71, <b>81, 89, 93</b>
2.7	290	3, 7, 15, 19, 25, 27, 29, 33, 37, 41, 45, <b>53, 57</b>
2.8	300	7, 13, 15, 21, 25, 29, 37, 43, 45, 51, 55, <b>81</b>
Review	304	5, 9, 15, 17, 19, 23, 25, 29, 35, 37, 47, 55, 57, 71, 75, 77, 79, 83, 87, 91, 95, 97, 99, 103
3.1	324	3, 5, 11, 13, 21, 29, 37, 39, 43, <b>45, 53, 91</b>
3.2	338	3, 9, 13, 15, 19, 23, 27, 31, 35, 39, 41, 47, 55, 57
3.3	350	5, 15, 21, 23, 25, 31, 35, 39, 41, 43, 45, <b>67, 71</b>
3.4	361	25, 27, 29, 31
3.5	380	3, 5, 11, 19, 23, 27, 31, 33, 41, 47, 51, 53, 59, 65, 69, <b>81, 87</b>
3.6	391	3, 7, 11, 15, 21, 29, 31, 33, 39, 45, 55, <b>63, 65, 97</b>
Review	406	3, 5, 13, 17, 19, 23, 27, 29, 31, 33, 35, 49, 61, 63, 73, 75

- The **bolded** questions are from the Practice Plus and Critical Thinking sections of the Exercise Sets. Some of these questions will be included in the exams.
- You are advised to do as many questions as possible, class-by-class, week by week. These questions will help to strengthen your understanding of the material taught in class. If you have any problems see your instructor.

#### The Final Exam is worth 40%

- The final exam covers all the subjects taught during the term.
- You can see all the past papers on the Math Dept. website.
- Try as many past exam papers as you can. Your instructor will guide and help you.



#### Class work is worth 15%

- This is based on at least 15 Quizzes and Homeworks.
- Quizzes are given at start of lesson.
- The quizzes cover topics discussed in the previous lessons.
- If you are absent or late there is NO quiz for you!
- Revise for the quizzes by doing homework questions.
- Homework questions must be done on-line at <u>www.coursecompass.com</u>. Your instructor will give you all the details you need to register.
- You can get extra help with Quizzes and Homeworks during the Extra Help Class on Mondays.

### Class Tests are worth 25%

- This is based on at least two class test (probably three).
- The questions on the class tests will come from quizzes, home works and the text book.
- Each class test usually lasts for 50 mins.



### <u>MATH 001</u>

## **Attendance Policy**

- Students must attend all classes.
- Attendance is taken at the beginning of the class.
- If you are up to five minutes late you will be marked LATE.
- Three Lates = 1 Absence.
- After five minutes you are **ABSENT**.
- The PSU policy is that NO excuses will be accepted for any absences. Even medical reasons will not be accepted!
  - 6 absences = 1<sup>st</sup> Warning
  - 11 Absences = 2<sup>nd</sup> Warning
  - 16 Absences = Denial Notice (This means you cannot enter any more classes or exams)
- PSU policy states that a student must pass **ALL** PYP courses within **FOUR** semesters.
- Remember Absences are the biggest reason for failing.
- Your instructor has at least four office hours every week. These are times when you can go to see him and ask for any help you need.
- Your instructor will tell you where his office is, and when his office hours are.
- You can use a Scientific Calculator for this course. We recommend CASIO FX-991 ES.