

**SUMMER ASSIGNMENTS - MATH DEPARTMENT
SUMMER 2010**

Failure to complete any summer assignment for the math department will result in an automatic zero on the summer assignment test.

HONORS PRECALCULUS B

Textbook: Precalculus Enhanced with Graphing Utilities (4th Edition)
ISBN 0-13-149092-3
Author: Michael Sullivan
Publisher: Prentice Hall

Page Number	Problems
69	39, 47-57 (odd), 61, 67
254	7, 9, 13
960	67-87 (odd)
975-976	17, 23, 45, 49, 61, 63, 71, 75, 79, 83, 89, 95
998-999	37, 45, 57, 59, 63, 65, 79, 89, 111, 113, 117
1030	95, 97

You are expected to complete the above summer assignment by the first full day of class. Make sure you show all required work. This assignment count be handed in on the same day that you will be tested on the material. This test will occur during the first full week of school. Don't wait for the last minute to do the summer assignment. If you have any difficulties look at the examples on previous pages for help. This material was covered in your Algebra 2 course therefore it should be a review for you.

GEOMETRY LEVEL 3

The following exercises are some topics learned in your Algebra I L-3 course needed for Geometry.

The review is mandatory. This review will be collected during the first week of school. A test will be given on this material at the end of the week.

The exercises are found in the back of the **Geometry text book** (Glencoe Mathematics)

Page #	Exercises #
729	32, 33, 34, 35
733	5, 6, 8
738	2, 4, 6, 8, 10, 14, 16, 18, 20, 26, 30, 36

743	2, 4, 6, 8, 10, 12, 14, 16, 18
745	2, 4, 6, 8, 10, 12, 14, 16, 18, 20
747	2, 4, 6, 8, 10, 12, 16, 18, 20, 24, 26, 28, 30, 32, 34 36
751	2-40 Evens

Complete the following exercises:

1) Determine whether the graphs of each pair of equations are parallel, perpendicular or neither:

a) $y = -2x + 11$
 $y + 2x = 23$

b) $y = 3x + 5$
 $y = 5x + 3$

c) $y + 6 = -5$
 $y + x = y + 7$

2) Write an equation in slope-intercept form of the line that passes through the given point and is parallel to the graph of each equation.

a) $(-2, -7)$, $y = x - 2$

b) $(-3, 2)$ $2x - 3y = 6$

c) $(2, -1)$ $y = -0.5x + 2$

3) Write an equation in slope-intercept form of the line that passes through the given point and is perpendicular to the graph of each equation.

a) $(6, -13)$, $2x - 9y = 5$

b) $(3, 7)$ $y = \frac{3}{4}x - 1$

c) $(3, -3)$ $3x + 7 = 2x$

4) Write an equation of the line having the following properties.

a) Passes through $(-5, 3)$ and is perpendicular to the x- axis.

b) Is parallel to the graph of $y = \frac{5}{4}x - 3$ and passes through the origin

c) Has an x- intercept of 3 and is parallel to the graph of $5x - 3y = 2$

d) Has a y-intercept of -6 and is parallel to the graph of $x - 3y = 8$

HONORS ALGEBRA 2 AND ALGEBRA 2 LEVEL 3

Textbook: Intermediate Algebra

Publisher: Pearson, Prentice Hall

ISBN: #0131467735 or #0131467751

This assignment will be completed during the freshman summer school sessions. If you are not enrolled in summer school, it is your responsibility to complete the assignment on your own before school opens in August. The assignment will be collected by the teacher on the first day of class. You will be tested on the contents of this work during the first full week of school.

The problems listed below are to be done neatly on loose leaf paper. Make sure you show all work, when necessary.

Pages 17-18 #1-4(all), 20-50(even)

Pages 31-32(without calculator) #1-10, 15, 20, 30, 34, 35, 48, 54, 58, 70, 74

Pages 39-40(without calculator) #1-6, 10, 16, 22, 26, 28, 32, 37, 42

Pages 47-49 #1-8, 16, 24, 32, 40, 48, 54-70(all)

Pages 60-61 #1-5, 7, 8, 14, 26, 32, 39, 44, 48, 51

Pages 75-76 #10-32(even)

Pages 86-87 #1, 12-30(even)

Pages 97-98 #1, 7, 8, 14, 20, 24, 28, 30, 36, 40, 44

HONORS PRECALCULUS A

Textbook: Precalculus Graphical, Numerical, Algebraic

Author: Demana, Waits, Foley, Kennedy

Publisher: Addison Wesley/Pearson

Edition: Eighth

You have chosen to take Honors Precalculus A, a **highly accelerated course** meant to prepare you for the **rigorous curriculum of AP Calculus**. Students enrolled in this course are expected to have a **strong mathematical background**. You must be willing to work hard all year long.

Students are expected to complete the summer assignment outlined below by the first full day of class. All problems are to be done **neatly on loose leaf paper**. Show work, when required. You will hand in this assignment on the day of the test. You will be tested on this

material during the first full week of school. Read the sections prior to working out the problems. **We will not go over every problem.** This is review material and **your responsibility.** **Do not wait until the last minute to do the problems!!!**

Read the following sections:	Pages:
Properties of Exponents (only)	7
Forms of Equations	30
Parallel and Perpendicular Lines	32
Radical and Rational Exponents	779 – 782
Polynomials and Factoring	784 – 789
Fractional Expressions	791 – 794

Do the following exercises:

Pages:	Numbers:
10	48 – 52 even
26	28, 50, 54
36 – 37	12, 18, 24, 44
782 – 783	8, 11, 18, 22, 32, 34, 35, 40 – 50 even, 54 – 82 even
789 – 790	6 – 12 even, 16 – 20 even, 24, 28, 32 – 40 even, 44, 48, 52, 56 – 60 even, 64, 68 – 76 even, 80 – 88 even
794 – 795	8, 11 – 14 all, 16, 18, 36, 38, 42, 44, 48, 50, 52, 58, 62, 64, 68 - 74even

HONORS CALCULUS

You have chosen to take Honors Calculus, an accelerated course. Due to the amount of topics covered in this course, you are expected to have a strong mathematical background in Precalculus and be willing to **work hard all year long. (No senioritis will be tolerated).**

Students are expected to complete the assignment outlined below by the first full day of class. All problems are to be done neatly on loose leaf paper. Show work. You will hand in this assignment on the day of the test.

On the first full day of class, I will answer questions on the homework. **(We will not do all the problems!! This is your responsibility.)** You will be **tested** on this material during the first full week of school. **If necessary read the section before attempting the problems.**

From the textbook **Calculus Early Transcendental (8th edition):**

Lesson 1.1: pp. 12 - 14 # 1, 9, (for the remaining problems find only the domain **without having to depend on a calculator**) 11 a, d, and e, 12 d, 13 a, c, e, 14 a, c, 19

Lesson 1.3: pp. 36 – 38 # 1, 5, 11, 15, 19, 29, 31, 33, 35, 43, 53, 57

Lesson 1.4: p. 51 # 33 (Sketch over one period and label the values of the angles on the x-axis for the beginning, one-fourth, middle, three-fourth, and end of the interval as well as the maximum and minimum values on the y-axis)

Lesson 1.5: p. 63 # 13

Lesson 1.6: p 74 # 5, 6, 17 – 25 odd

Appendix A (This is an excellent review of trigonometry):
p 12A – 13A # 7, 9, 15 c and e, 21, 30 and 31 (over the interval $[0, 2\pi)$), 49

ALGEBRA 1 LEVEL 3

Textbook: Elementary Algebra
Publisher: Pearson, Prentice-Hall
ISBN #: 0131467662

This assignment will be completed during the freshman summer school sessions. If you are not enrolled in summer school, it is your responsibility to complete the assignment on your own before school opens in August. The assignment will be collected by the teacher on the first day of class. You will be tested on the contents of this work during the first full week of school.

The problems listed below are to be done neatly on loose leaf paper. Make sure to **show all work**, when necessary.

Page Number:	Exercises:
16 – 17	15 – 51 odd, 63 – 78 all
26 – 27	(without calculator) 9 – 77 odd
38	(without calculator) 21 – 71 odd
47 – 48	(without calculator) 1 – 20 all, 31 – 49 odd
55 – 56	9 – 63 odd
63 – 64	9 – 59 odd
82 – 83	19 – 55 odd