

## MA 180 HOMEWORK ASSIGNMENTS – NEW (5<sup>TH</sup>) EDITION OF THE BOOK

In order to succeed in the class you need to read the book and do problems **on a daily basis**. Spend **at least two hours per day** in your math homework. Some homework questions will be answered at the beginning of each class, but I strongly recommend that you go with your questions to the Math Science Center and/or to my office.

Show all work. Keep homework on a binder. Do not use spiral paper.

- Read section
- Read examples
- Solve the “Now Work..(pencil)” problems listed after each example which are similar to the examples
- Assess your understanding by working on the “Are you prepared” and the “Concepts and Vocabulary” sections
- Solve the problems assigned below. If you have difficulty with a certain topic solve more odd numbered problems
- To review, read objectives and think on how to do each type of problem.
- Write formulas on a separate paper and memorize them
- Check the end of each section that contains a great summary, review, and test
- Complete all handouts from the web page

Ch.Se ct	Textbook Exercises	MathXL Category
1.1	21, 23, 27, 29, 33, 37, 43, 49, 55, 63, 65, 69, 71, 73, 75, 77, 83, 101, 105, 107, 113	Homework
1.2	23, 25, 29, 31, 33, 35, 37, 39, 41, 47, 51, 57, 59, 71	Homework
A.5	43, 51, 63, 67, 71	Homework
A.6	23, 31, 37, 45, 51, 63, 77, 105	Homework
<b>1.3</b>	<b>5,15,29,33</b>	<b>Other (Written)</b>
1.5	9, 17, 23, 31, 33, 37, 39, 41, 43, 45, 49	Homework
A.9	69, 71, 73, 79, 93, 95	Homework
	<b>TIME OF REFLECTION:</b> <b>Are you studying at least two hours per day?</b> <b>Are you reading the book?</b> <b>Are you reading the examples of the book and doing the pencil problems suggested after each example?</b> <b>Are you going for help to the math science center?</b> <b>Do you have the phone number of at least one classmate to ask for help when you are doing homework at home?</b> <b>Are you participating in class?</b> <b>Are you asking enough questions in class?</b> <b>Are you visiting my office hours to get help?</b> <b>Are you doing all it takes to succeed in this class and get ready for the next math class?</b>	
2.1	15, 17, 19, 21, 27, 39, 45, 51, 55, 65, 71, 81, 83, 85, 91, 93, 103	Homework
2.2	9, 13, 15, 25, 27, 33	Homework
2.3	11, 13, 15, 17, 19, 21, 29, 45, 53	Homework
<b>2.3</b>	<b>33, 63, 69, 71, 81</b>	<b>Other</b>

		<b>(Written)</b>
2.4	9, 11, 13, 15, 25, 31, 33, 35, 41, 51, 53, 55	Homework
2.5	7,9,11, 13, 15, 17, 19, 21, 23, 25, 27, 31, 33, 35, 37, 45, 47, 49, 51, 53, 55, 61, 69	Homework
2.6	3, 5, 7, 15, 23, 25	Homework
	<b>TIME OF REFLECTION:</b> Are you studying at least two hours per day? Are you reading the book? Are you reading the examples of the book and doing the pencil problems suggested after each example? Are you going for help to the math science center? Do you have the phone number of at least one classmate to ask for help when you are doing homework at home? Are you participating in class? Are you asking enough questions in class? Are you visiting my office hours to get help? Are you doing all it takes to succeed in this class and get ready for the next math class?	
	<u>To refresh your memory, read again the recommendations on how to study</u> which are given at the top of the previous page. Reading the book and the examples is <b>VERY IMPORTANT</b> . Always practice solving the “Now Work” problems (Pencil problems) after reading each example. On a daily basis, use the list of objectives to “think on how to do the problems”. This is a great way of getting ready for a test. <b>DO MORE</b> than the suggested problems if you have difficulty with a certain topic.	
3.1	17, 19, 21, 23, 27, 31, 33, 39	Homework
3.2	5, 7, 9, 11, 21	Homework
3.3	11, 13, 15, 17, 19, 21, 29, 35, 39, 43, 45, 79	Homework
<b>3.3</b>	<b>47, 74, 80, 82, 97</b>	<b>Other (Written)</b>
3.4	3, 9, 13, 17, 27	Homework
3.5	5, 9, 13, 23, 25, 35	Homework
4.1	11, 13, 15, 17, 45, 57, 61, 65, 93	Homework
A.3	61, 63, 67, 71	Homework
4.2	13, 21, 23, 25, 31, 37, 43, 45	Homework
4.3	13, 25, 27, 33, 47, 53, 55, 57	Homework
4.4	7, 9, 19, 29, 33, 39, 67, 73	Homework
4.5	11, 19, 21, 27, 39, 55, 63, 67, 75, 77, 85, 87	Homework
4.6	7, 11, 15, 17, 27	Homework
<b>4.6</b>	<b>33, 39, 41, 42 44</b>	<b>Other (Written)</b>

5.1	7, 9, 11, 21, 25, 33, 35, 49, 53, 61, 65, 75	Homework
5.2	11, 13, 15, 17, 19, 27, 31, 35, 41, 45, 49, 63, 71, 73, 75, 83, 89	Homework
5.3	11, 13, 21, 23, 27, 29, 31, 37, 51, 53, 59, 67, 75, 77, 79, 81, 87, 95, 97, 101	Homework
<b>5.mix</b>	<b>5.2 #49; 5.3 #112, 113; 5.4 #133; 5.5 #96; 5.8 #21</b>	<b>Other (Written)</b>
5.4	9, 15, 17, 23, 25, 29, 31, 33, 49, 57, 59, 63, 69, 71, 87, 99, 111, 117, 123	Homework
5.5	7, 9, 11, 13, 15, 17, 19, 23, 25, 27, 31, 45, 51, 53, 57, 65, 73, 81, 85	Homework
5.6	11, 13, 21, 31, 41, 53, 63, 71, 75, 85, 87	Homework
5.8	1, 3, 5, 7, 11, 17	Homework
5.8&5.9	Optional Material. Newton's Law Cooling 5.8:13,15,23,27.Logistic Models 5.9: 1,3,5	Homework
5.9	1, 3, 5	Homework
6.1	11, 13, 15, 17, 19, 21, 35, 39, 41, 45, 47, 51, 55, 57	Homework
6.1	Optional Material: Arcs & Speeds. 71, 73, 75, 91, 99, 103, 109	Homework
6.2	11,13,15, 19, 21, 23, 25, 27, 37, 39, 45, 47, 53, 59, 63, 71, 73, 75, 83, 87, 91, 105	Homework
6.3	11, 15, 27, 31, 33, 35, 47, 49, 59, 63, 67, 77, 79, 81, 83, 89, 95, 101,103,113	Homework
6.4	9, 11, 13, 15, 17, 23, 27, 29, 31, 33, 35, 37, 53, 59, 67, 71, 75, 79, 85, 87, 91, 93	Homework
6.5	7, 11, 29, 31, 41, 43	Homework
<b>6.mix</b>	<b>6.2 #120, 121; 6.3 #93; 6.5 # 29, 31; 6.6 # 25, 36</b>	<b>Other (Written)</b>
<b>6.Proj</b>	<b>Chapter Project – Tidal Data, p.437</b>	<b>Other (Written)</b>
7.1	13, 15, 17, 19, 21, 23, 25, 29, 35, 37, 41, 43, 45, 47, 49	Homework
7.2	9, 13, 15, 21, 27, 31, 39, 41, 57, 67, 69	Homework
<b>7.3</b>	<b>13, 14, 19, 25, 49, 53, 69, 80</b>	<b>Other (Written)</b>
7.4	11, 17, 23, 25, 27, 31, 37, 39, 45, 57, 73, 75, 83	Homework
7.5	7, 11, 19, 33, 39	Homework
7.7	7, 13, 15, 21, 25, 31, 35, 41, 53	Homework
7.8	21, 23, 33, 35, 41, 47, 59	Homework
8.1	19, 21, 23, 25, 27, 43, 45, 47, 51, 55, 57, 61, 69, 71	Homework
8.2	37, 39, 41, 51, 57	Homework
8.3	33, 35, 37, 45, 51, 53	Homework
8.4	Optional Material –Areas of Triangles- 5, 7, 11, 41	Homework
<b>10.7</b>	<b>Parametric Equations. Series of worksheets (see N. Shaw)</b>	<b>Other</b>

## **Math 180 – Word Problems Portfolio**

**Exams will contain word problems. All of the details indicated in this page are taken into consideration when grading your papers. It is your responsibility to show every little detail, as we do in class, in order to get full credit. Many of the assigned problems are similar to the examples worked out in the book.**

- Solve one problem per page. (Ok to solve one on the front and one on the back of the page).
- Define the meaning of the variables with symbols and words. Indicate the corresponding units. (For example:  $y$  is the cost in dollars,  $x$  is the number of refrigerators produced)
- Show all steps in order to get credit.
- Write answers using complete sentences.
- Show a sketch of the situation or function in each case. You don't need to set up a scale. Sketches that are neat and make sense are ok.
- Label the axes with symbols, words and units.
- Neatness is required! Take pride in what you do. This is part of your training as a future professional
- If you use the calculator to graph, what window will show a "complete, meaningful" graph? DO NOT use the zoom-fit window. Many times, it distorts the graph. Exploring the TABLE may help in setting windows.

<b>Chapter 1</b> Section 1.1: 108, 110 on page 16 Section 1.4: 116, 120 on page 42 Section 1.5: 51 on page 50	<b>Chapter 2</b> Section 2.1: 94, 102 on page 69 Section 2.2: 31, 41, 42 on page 77 Section 2.3: 68, 70 on page 88 Section 2.4: 50 on page 98 Section 2.5: 91 on page 111 Section 2.6: 22, 25, 26 on page 117
<b>Chapter 3</b> Section 3.1: 40, 44, 46, on page 134 Section 3.2: 20 on page 141 Section 3.3: 84 on page 153 Section 3.4: 9, 12, 15, 30 on page 160 Section 3.5: 34, 36 on page 167	<b>Chapter 4</b> Section 4.1: 102 on page 190 Section 4.2: 54 on page 201 Section 4.3: 56, 60, 62 on page 211 Section 4.4: 72 on page 219
<b>Chapter 5</b> Section 5.1: 66, 68, 70, 72 on page 254 Section 5.2: 88, 90, 94 on page 268 Section 5.3: 98, 100 on page 282 Section 5.4: 117, 120, 124. 132 on page 295 Section 5.6: 98 page 312 Section 5.8: 6, 10, 12, 14, 24 on page 332	

## **Math 180 – Portfolio on word problems for TRIGONOMETRY – Chapters 6, 7, 8**

Be neat. Write title of problem, problem number, page number and section number. Write functions and define variables. Some problems will be done in more than one section dealing with different types of questions. Practice graphing some of the functions. Label and indicate window values. You must solve one problem per page.

### **Section 6.2**

**Rain Gutters:** example 8, page 373

**Projectile Motion** – Projectile fired at an inclination with horizontal: 117-120, page 380

**Calculating time to slide down an Inclined Plane:** 121, page 380

**Calculating time for a trip:** 123, page 380

**Projectile Motion** – Object propelled up an inclined plane: 125, page 381

### **Section 6.3**

**Calculating time for a trip:** 119, 120, page 394

### **Section 6.4**

**Alternating Current Circuits and Generators:** 93-96, page 409

### **Section 6.5**

**Carrying a Ladder around a corner:** 49, page 418

### **Section 7.5**

**Projectile Motion** – Projectile fired at an inclination with horizontal: Example 4, page 479

**Projectile Motion** – Object propelled up an inclined plane: 83, page 484

### **Section 7.7**

**Projectile Motion** – Projectile fired at an inclination with horizontal: 66, page 494

### **Section 7.8**

**Constructing a Rain Gutter:** 65, page 501, except for part (b)

**Projectile Motion** – Object propelled up an inclined plane: 66, page 501

**Carrying a Ladder around a corner:** 68, page 502

**Projectile Motion** – Projectile fired at an inclination with horizontal: 69, 70, page 502

## **Chapter 8**

**Practice all word problems done in class**