## Study Guide for MA180 Test I, Spring 2007

$\odot \odot \odot \odot \odot \odot$ Best of Luck! $\odot \odot \odot \odot \odot \odot \odot$

1) Study the Practice Test I, and Chapters 1, 2 Review Packet on my website,
2) Please Review the Following HW Problems, and Study the Highlighted Problems Even More.

| $\begin{aligned} & \text { A. } 3 \\ & \text { A. } 4 \\ & \text { A. } 5 \end{aligned}$ | $17,31,47,67,71,79,89$ $5,9,23,25$ Pencil Problems 13, 23, 33, 45, 49, 67, 85, 89, 95,99, $105,111,117$ | Polynomials \& Rational Expressions Obj. $3 \& 4$ only <br> Polynomial Division Obj. 1 Only Solving Equations |
| :---: | :---: | :---: |
| $\begin{aligned} & \text { A.8 } \\ & 1.1 \\ & 1.2 \end{aligned}$ | Pencil Problems 11, 23, 31, 39, 45, 53, 73, 91, 95 <br> Pencil problems, 1-10, 39, 43, 53, 59, 63, 67, 77, 81 <br> Pencil problems, $1-10,13,25,29,35,37,41,49,55,57$, <br> 61, 65, 79 | Interval Notation; Solving Inequalities Rectangular Coordinates Graphs of Equations in Two Variables |
| 1.3 1.5 | Pencil problems, 1-4, 9, 13, 17, 23, 27, 31, 33, 35 <br> Pencil problems, 1-4, 7, 15, 23, 29, 35, | Solving Equations in One Variable Using Graphing Utility Circles |
| $\begin{aligned} & 2.1 \\ & 2.2 \end{aligned}$ | Pencil problems, $1-14,21,27,31,41,47,55,63,69,75$, 89, Pencil problems, 1-10, 17, 19, 23, 27, 31, 37, 39, 41 | Functions <br> The Graph of a Function |
| 2.3 2.5 | Pencil problems, $1-10,25,27,31,35,49,55,63,65,67$, $71,73,75,77$, Pencil problems, $1-8,17,19,21,23,25,37,41,45,51$ | Properties of Functions <br> Library of Functions; Piecewise Defined Functions |
| 2.6 2.7 | Pencil problems, 1-6, 7-34 odd, 53, 55, 67, 69, 73, 81 <br> Pencil problems, 1, 5, 7, 9, 11, 21, 27, 31 | Graphing Techniques: Transformations Mathematical Models: Constructing Functions |

## Please See Next Page

## 3) Write the equation for each of the following functions.

a) Stretch by a factor of 2
b) Compress by a factor of 0.2

4) What function matches the graph?
a) $f(x)=-\sqrt{x-5}+4$
b) $f(x)=\sqrt{x-5}+4$
c) $f(x)=\sqrt{-x+5}+4$
d) $f(x)=\sqrt{-x-5}+4$

e) $f(x)=\sqrt{-x-5}-4$
f) $f(x)=-\sqrt{x-5}-4$
g) $f(x)=\sqrt{x-5}-4$


