Here is a checklist of what is assigned for Week 4 to do by 11:59 PM **Sunday, September 21. Note:** E-HW2 *Sections 2.1 and 2.2* is due 11:59 PM **Wednesday, September 17.**

| | Tasks for Week 4 | 1 |
|----|---|------|
| | Inverse Functions, Concavity, and Quadratic Functions | when |
| | | done |
| Ι. | Schedule a time in the Testing Center, KT 232, to take Exam 1. Call 260-481-6600. | |
| | You want to do this early, since seats do fill up. Their available days and time slots are posted | |
| _ | below, and Exam I needs to be taken any time in the window of Sat., Sept. 20 to Mon., Sept. 29. | |
| 2. | Complete E-HW2 Sections 2 1 and 2 2 due 11:59 PM Wed Sept 17 | |
| | (Unlimited attempts allowed! Your highest score counts.) | |
| 3. | After reading Section 2.4 of the text, watch the Video of Class Lecture 9 on Section 2.4. | |
| | Learning Objectives: | |
| | 1. Use a graph, table, or an equation to evaluate a function or its inverse. | |
| | 2. Interpret expressions of equations when involve function notation and inverse function notation | |
| | After watching the video: | |
| | For additional practice, work these problems out of the text (no need to submit them to me) | |
| | Section 2.4 13-23, 26-35, 40 (not for hand-in) | |
| | The worked out solutions are on reserve at the Information Desk at the Helmke Library. | |
| 1 | After reading Section 2.5 of the text, watch the Video of Class Lecture 10 on Section 2.4 and 2.5 | |
| т. | Learning Objectives: | |
| | 1. Find and interpret the inverse of an invertible function if given its formula. | |
| | 2. Determine the concavity of a function if given | |
| | • its graph | |
| | Its formula its table (by exploring its average rate of alonge over consecutive intervale) | |
| | Its table (by exploring its average rate of change over consecutive intervals) its verbal description (by examining how it increases or decreases) | |
| | • its verbal description (by examining now it increases of decreases). | |
| | After watching the video: | |
| | For additional practice, work these problems out of the text (no need to submit them to me) | |
| | Section 2.4 –24, 28-31, 33 and Section 2.5 –1-18, 20 and Chapter 2 Review - 29-31, 33, 37, 42, 46 | |
| | The worked out solutions are on reserve at the Information Desk at the Helmke Library. You can get electronic versions of many of these on eHW in the Practice Questions area. | |
| 5. | After reading Section 2.6 of the text, watch the Video of Class Lecture 11 on Section 2.6 | |
| | Learning Objectives: | |
| | 1. Find and interpret the zeros of a function using the quadratic formula, factoring. | |
| | 2. Understand the factored form of a quadratic function. | |
| | 4 Solve quadratic equations algebraically graphically or using a table | |
| | 5. Use a graphing calculator to graph a function in an appropriate viewing window. Use built-in calculator features such | |
| | as an intersection point finder, maximum/minimum finder, or zero finder to solve problems | |
| | After watching the video: | |
| | For additional practice, work these problems out of the text (no need to submit them to me) | |
| | Section 2.6 1-26, 28, 30 and selected problems from Tools for Chapter 2 as needed | |
| | The worked out solutions are on reserve at the Information Desk at the Helmke Library. You can get electronic versions of many of these on eHW in the Practice Questions area. | |
| 6 | Watch the solution to the problem about the Great Santini. | |
| | We work the following problem which is also on eHW 3. Watch up to the 20 minute 15 second mark of the video. | |
| | The Great Santini is shot out of a cannon into a tub of water! He is launched from the roof of a building with | |
| | height h_0 . His height y, in meters, above ground and time t, in seconds, after he is launched, is given by $y = 100 - 5^2 + 000 + 100$ | |
| | n(t) = -5t + 90t + 60. (c) What is the height <i>h</i> in maters of the huilding? | |
| | (a) what is the neight, n_0 , in meters of the bundling? (b) How many seconds does it take for him to land? | |
| | (c) What length of time will be 60 meters or higher in the air? | |
| | (d) Report the domain and range of $h(t)$. | |

| 7. | Complete Interactive Video V11: Quadratic Functions and Zeros | | | |
|-----|--|--|--|--|
| | due 11:59 PM Sun., Sept. 21. | | | |
| | This video covers material in Section 2.6 (You have unlimited attempts to earn 100%.) | | | |
| 8. | Complete Interactive Video V12: Quadratic Functions and Symmetry | | | |
| | due 11:59 PM Sun., Sept. 21. | | | |
| | This video covers material in Section 2.6 (You have unlimited attempts to earn 100%.) | | | |
| 9. | Complete E-HW3 Sections 2.4-2.6 due 11:59 PM Sunday, Sept. 21. (Unlimited attempts allowed! Your highest score counts.) | | | |
| 10. | Print the <u>review sheet</u> for Exam 1, polish your rhino horn, and charge into that Testing Center with: | | | |
| | 1. your photo ID and | | | |
| | 2. your graphing calculator. | | | |
| 11. | Please continue to use the Student Discussion Forum in Blackboard to post questions and answers in the forum called <i>Chapter 2: Functions</i> . Substantive activity in the forum will add a maximum of 5 points to your score to <i>Interactive Video V12: Quadratic Functions and Symmetry</i> . | | | |

Exams:

All exams are proctored paper/pencil (not online), given in the <u>Testing Center</u>, KT 232 or at an alternate <u>pre-approved</u> testing center. Contact the Online Learning Office, 260-481-5706, to discuss alternate testing centers.

- You will have 90 minutes for Exam 1 which is available from Saturday, Sept. 20– Monday, Sept. 29
- A missed exam will receive a score of 0.
- Cell phones are not allowed at the testing stations. Please make the appropriate arrangements for storing cell phones.
- A photo ID is required upon check in. You will also need to bring your graphing calculator.

Tests must be scheduled by calling 260-481-6600.

Online Education tests are given during the following days and times:

| Days: | Testing Center (KT 232) Appointment Times: |
|-----------------|--|
| Monday-Thursday | 8:30 a.m., 10:00 a.m., 11:30 a.m., 1:00 p.m., 2:30 p.m., 4:00 p.m. and 5:45 p.m. |
| Friday | 8:30 a.m., 10:00 a.m., 11:30 a.m., 1:00 p.m. and 2:30 p.m. |
| Saturday | 8:30 a.m. and 10:00 a.m. |