Math 160 – Homework

Assigned Problems

The instructions are provided after the list of exercises.

Correct	Sect	Exercises to complete
___ / 4	4.1	67, 71, 75, 77
___ / 10	4.2	23, 27, 31, 35, 37, 39, 41, 49, 51, 53
___ / 12	4.3	11, 15, 19, 21, 23, 25, 27, 73, 79, 81, 85, 97
___ / 5	4.4	53, 67, 69, 71, 74
___ / 2	4.5	49, 51
___ / 4	4.6	63, 65, 67, 69
___ / 4	4.7	35, 37, 39, 41
___ / 4	5.1	53, 55, 57, 61
___ / 5	5.2	17, 19, 43, 45, 47
___ / 8	5.3	9, 11, 13, 15, 39, 41, 43, 51
___ / 8	6.1	7, 11, 17, 21, 23, 31, 35, 57
___ / 8	6.2	1, 3, 5, 7, 29, 37, 41, 43
___ / 7	6.3	37, 38, 39, 40, 43, 45, 53
___ / 6	6.4	5, 15, 33, 37, 41, 47
___ / 7	7.1	31, 37, 43, 49, 55, 61, 65
___ / 8	7.2	31, 35, 39, 41, 75, 79, 83, 87
___ / 8	7.3	19, 23, 25, 29, 31, 39, 57, 59
___ / 7	7.4	17, 39, 43, 47, 65, 73, 75

Correct	Sect	Exercises to complete
___ / 10	8.1	27, 33, 35, 37, 45, 49, 53, 79, 83, 93
___ / 6	8.2	17, 23, 57, 63, 81, 83
___ / 11	8.3	25, 27, 29, 33, 35, 37, 59, 61, 71, 73, 74
___ / 5	8.4	31, 33, 53, 55, 57
___ / 9	8.5	19, 25, 27, 31, 33, 34, 39, 49, 51
___ / 4	9.1	81, 83, 85, 87
___ / 4	9.2	41, 51, 55, 57
___ / 4	9.3	31, 61, 65, 67
___ / 4	10.1	15, 19, 29, 45
___ / 5	10.2	11, 13, 21, 31, 39
___ / 3	10.3	7, 9, 24
___ / 5	10.4	5, 7, 9, 10, 12
___ / 8	3.1	49, 53, 57, 59, 61, 63, 69, 71
___ / 8	3.2	61, 65, 73, 75, 85, 89, 91, 95
___ / 10	3.3	27, 31, 37, 39, 40, 41, 42, 47, 49, 51
___ / 9	3.4	27, 31, 35, 39, 41, 45, 47, 53, 59

Homework should consist of more than just answers and a reduction in points may occur if it appears you're merely copying answers from the book or other resource. This includes not showing sufficient work, failure to label, or skipping important steps.

The point of homework is to help you understand the material. Taking shortcuts doesn't help you in the long run.

All work must be original and completed during the Fall 2023 semester to receive credit.

Instructions

Homework should be attempted after reading the Canvas lecture notes, watching the videos, and attending the classroom lecture. There may be hints or special directions inside Canvas.

Check your answers against those in the back of the book. Correct any mistakes that you can.

Your score is the number of questions that you have correct when it is turned in, not the number that you originally had correct before you checked the answers. Do not award partial points for incomplete problems.

Homework is due at the beginning of class, two class periods after we begin a new section of the textbook. If we start a section on Monday, then homework is due on Friday. If we start a section on Wednesday, but Friday is a holiday, then the homework will not be due until the following Wednesday.

Two class periods is more time than you should take, but it allows you time to ask questions between the time we cover the material and the time it is due. Do not fall into the habit of waiting until it is due to start.

Homework will be accepted up to one week late, but there may be a 20% penalty applied for each class period it is late.

Even though some homework may not be due until after the exam over that material, it is important to work the problems before the exam. No work will be accepted after December 6.

Guidelines

- Each section of homework begins on a separate page with the student's name, the section number, and the unreduced fraction of problems correct at the top. Each additional page should contain at least the section number at the top.
- Each problem is clearly identified. Problems do not need to be in the order, but it should be clear which problem you're working. If you do not work your problems in consecutive order, then you may want to identify the problems you can find at the top of each page.
- For simple problems, the original problem is copied down. Students have a tendency to just write the answer and that provides no help to you when you go back later to look at your notes to study because you do not know what the problem was.
- For story problems, a brief description of the problem is sufficient (example, "minimize the distance") and then write down the key aspects of the problem. If pictures are helpful, then they should be included in your notes.
- Work should include labels when appropriate. This is especially true when dealing with matrix applications where rows and columns have specific meanings.

- Story problems deserve written answers – don't say $x_1 = 10$ when you mean "produce 10 thingamajigs at the whatchamacallit plant."
- Only write in a single column and write top to bottom. Do not snake a problem around trying to minimize the amount of paper used. Trying to cram all of the work onto a single page leads to disorganization and makes it difficult to follow. Problems that start on the left side, work down and then continue on the right side of the page are hard to follow as well.
- It should be obvious what your final answer is. It does not have to be circled or boxed, especially if it is the last thing written on the problem. If it isn't the last thing, then highlight, circle, or box it. If you do a check of your answer, then clearly identify that you are checking the work (writing "check:" in front of it is a good indicator). If your answer is in the middle of the work because your work is all over the place, then see the previous item about writing in a single column.
- Draw a line through any mistakes, do not erase them. If there is room (remember you're only using one column), make the correction there. If you begin a problem over from scratch, you may use an X through the original problem (do not scribble it out) but you should still identify what went wrong. Students think that their work needs to be perfect. When you erase your mistakes, you forget what it was that caused them in the first place. By drawing lines through mistakes and making a note about what the problem was (arithmetic, algebra, calculator, ...), you can start to see recurring patterns and then be on the lookout for those mistakes in the future. If you erase the mistakes, all of that is lost; students think "I got 100% on the homework so I understand this" and forget about all the struggle. When students turn in homework with no mistakes and corrections, instructors suspect the student may just be copying work from an online homework site rather than doing the work themselves and that is bad for understanding.
- Indicate the eventual correctness of each problem with a checkmark or x-mark. For questions that you were unable to figure out, annotate what parts you are certain about, where your confidence wanes, where you are completely lost, etc. These are good questions to get help with and having an idea of where the problem lies can save the person helping you.
- When you have to get additional help in working a problem, identify where you got it from. Was it from the book? Was it from the instructor's notes in Canvas? Did you use a homework resource site like Chegg or Slader? Was it a YouTube video? Getting help is not bad, but doing it for the majority of the problems can be an indication that you are not understanding the material or that you are lacking prerequisite skills. Listing when and where you struggle can help identify good resources and provide insight when additional help is needed.
- The work is original. Do not just copy solutions from manuals or websites. A major clue you've done this is when the work matches nothing we've done in class or in the book.