1050 Week at a Glance: Week 10

Math 1050-90

Objectives

8.4 Determinant of a matrix

- Find the determinants of square matrices.

8.5 Applications of Matrices and Determinants

- Use Cramer's rule to solve a system by determinants.
- Determine the area of a triangle given three vertices on the coordinate plane.
- Write an equation of a line given two points.

9.1 Sequences and series

- Use sequence notation to write the terms of a sequence.
- Use factorial notation.
- Use summation notation to write sums.
- Find the sums of infinite series.
- Use sequences and series to model and solve real-life problems.

Study Tip of the Week:

There are infinitely many paths in mathematics! I hope you have all figured out by now that there is never one right way to solve a mathematics problem. There may be one answer, but many paths to get there, even though legal "mathematical moves" are necessary to discover the answer. It's much like driving to any destination, say your best friend's house. There is indeed one "right" ending place and you know when you've arrived because you get to see your friend there. However, as long as you follow the rules of driving (like not driving through someone's home), there are many legal ways to arrive at your destination. There may be one way that is most efficient, but that doesn't negate the fact that infinitely many paths exist. (Might this apply to other areas of life also?)

To Do:

For Lessons 8.4–8.5, 9.1

- ☐ Book reading
- ☐ Print blank slides
- ☐ Watch lecture videos
  - ☐ Practice Problems
- ☐ WebAssign Homework

Some of the writing in the 8.5 video goes off the screen. You may find it helpful to have the completed notes printed out when watching it.

Supplementary Materials:

- ☐ **Extra videos about minors and cofactors (optional)**

Due by Sun 11 pm

- ☐ **Canvas Quiz Week 10**

Due by Mon of next week, 11 pm

- ☐ **WebAssign HW 8.4**
- ☐ **WebAssign HW 8.5**
- ☐ **WebAssign HW 9.1**