

MATH 226 midterm 2 preparation guide

Midterm 2 will take place on Monday, November 13, during the class time.

You can bring one formula sheet in your own handwriting. No other notes, books or calculators are allowed. Midterm 2 will cover sections 11.1-11.8 and 12.1-12.8, in particular the following topics:

- Linear approximation, tangent planes, normal lines.
Suggested exercises: Section 11.4: 1-6, 19-24, Section 11.6: 31-36
- Critical points, local maximum, local minimum and saddle points.
Suggested exercises: Section 11.7: 3-14, 23-28
- Lagrange multipliers.
Suggested exercises: Section 11.8: 1-16, 29-41
- Double integrals, Fubini's theorem.
Suggested exercises: Section 12.1: 11-28
- Triple integrals in cylindrical and spherical coordinates.
Suggested exercises: Section 12.6: 17-28, Section 12.7: 21-32