

Spring 2023 MATH 1060Q Final Exam Suggested Practice Problems

The final exam will consist of a mix of short answer and multiple choice questions. It will be cumulative, covering all sections from 1.1-1.9, 2.1-2.2, 2.6, 3.1-3.5, 4.1-4.8, and 5.1-5.3 On short answer problems, you must show all work that leads to your answer in order to earn full credit. Remember that calculators are **NOT** allowed on the exam.

You may create a **cheat sheet** to bring to the exam. You can write anything you want on the cheat sheet (formulas, definitions, problems, etc...). The cheat sheet must be handwritten by you and should be written on the front and back of one page of regular size computer/notebook paper.

Below, is a list of practice problems from your textbook. You should use these problems to help you study for the exam. In addition, you should also study problems from your text, classnotes, old exams, classwork, quizzes, and WebAssign. Most of the problems listed below are odd-numbered problems, so you will be able to find the answers in the textbook. You should make a note of any problems you find difficult and seek help from your instructor or SI leader on those problems.

Sections 1.1-1.9 and 2.1-2.2

- See Exam 1 Suggested Practice Problems

Section 2.6, page 175

- #19, #21, #25, #31 (Finding intercepts, asymptotes, and holes)

Sections 3.1-3.5 and 4.1-4.4

- See Exam 2 Suggested Practice Problems

Section 4.5, pages 304-305

- #31, #35, #45 (Sketching Sine and Cosine Functions)
- #55, #57 (Describing Transformations of Sine and Cosine)
- #65, #67, #69 (Finding Amplitude, Period, Phase Shift, and Vertical Shift)

Section 4.6, page 315-316

- #9, #11, #13 (Recognizing Graphs of Secant, Cosecant, Tangent, Cotangent)
- #49, #51, #53 (Solving Trigonometric Equations)

Section 4.7, page 324-325

- #1, #2, #3, #4 (Definition, Domain, and Range of Inverse Trigonometric Functions)
- #9, #11, #15 (Evaluating Inverse Trigonometric Functions)
- #45, #47, #49, #51 (Compositions of Inverse Trigonometric Functions)

Section 4.8, pages 334-337

- #7, #9 (Solving Triangles)
- #17, #19, #25 (Angle of Elevation)
- #51, #53 (Harmonic Motion)

Section 5.1, page 353

- #19, #21, #23 (Simplifying Trigonometric Expressions)

Section 5.2, page 360

- #13, #15, #21, #27 (Verifying Trigonometric Identities)

Section 5.3, page 370

- #11, #13, #15, #17, #31, #39, #41 (Solving Trigonometric Equations)