MAC 2311 Exam 1 Review

1. Evaluate the difference quotient for the given function. Simplify your answer. 1.1 #27
2. Find the domain of the following functions: 1.1, #32, 37
3. b) c)
4. Graph the following functions: 1.1, #44, 48
5. b)
6. Determine whether f is even, odd, or neither: 1.1, #74,76,78
7. b)
8. Determine whether the curve is the graph of a function of x. If it is, state the domain and range of the function. See 1.1, #9 in your textbook for a picture of the graph
9. Classify each of the following functions: 1.2, #2
10. b) c) d)

e) f)

1. Explain how each graph is obtained from the graph of 1.3, #2

a) b) c) d)

e) f)

1. For functions and find the following: 1.3, #32
2. b) c) d)
3. Use the Law of Exponents to rewrite and simplify the expression. 1.5, #2a,3b
4. b)
5. Assume that f is a one-to-one function. If , what is ? 1.6, #15b
6. Find a formula for the inverse of the function: 1.6, #26
7. Find the exact value of each expression: 1.6, #37a,38a,64a,67b
8. b) c) d)

For section 2.1, review problems 3 & 5 from your textbook online. The online version has hints and video tutorials to go with each problem.

1. Use the graph from 2.2, #4 to state the value of each quantity, if it exists. If it does not exist, explain why.

a) b) c) d) e) f)

1. Determine the infinite limit. 2.2, #30
2. Given that find the following limits, if they exist. If they don’t exist, explain why. 2.3, #1abe
3. b) c)
4. Evaluate the following limits, if it exists. 2.3, #12,22
5. b)
6. Use the Squeeze Theorem to show that 2.3, #36