

Math 16A Homework Assignments.

All problems are from the 9th edition of *Calculus: An Applied Approach* by Ron Larson.
See the class **Syllabus** for instructions.

HOMEWORK 1

Lecture 1:

Section 1.1 (The Cartesian Plane and the Distance Formula)

Problems 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 31, 37

Section 1.2 (Graphs of Equations)

Problems 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, 31, 33, 35, 37, 39, 41, 43, 45, 47, 49, 51, 53, 55, 57, 59

Section 1.3 (Lines in the Plane and Slope)

Problems 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 31, 35, 37, 41, 45, 47, 49, 51, 53, 55, 57, 59, 61, 63, 65, 67, 75, 77, 79, 83, 85, 87, 89, 91

Lecture 2:

Section 1.4 (Functions)

Problems 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, 31, 33, 35, 37, 39, 41, 43, 45, 47, 49, 51, 53, 55, 63, 65, 67, 69, 73

SUBMIT TO GRADESCOPE BY 10:00PM ON WEDNESDAY, JANUARY 18:

Section 1.4 Problem 53

HOMEWORK 2

Lectures 3 and 4:

Section 1.5 (Limits)

Problems 1, 3, 7, 13, 15, 17, 19, 21, 23, 25, 27, 28, 31, 33, 35, 37, 39, 41, 43, 45, 47, 49, 51, 53, 55, 57, 59, 65, 67, 69, 75

Lecture 5:

Section 3.6 (Asymptotes)

Problems 1, 3, 5, 7, 9, 11, 13, 17, 21, 23, 25, 27, 29, 31, 33, 35, 37, 39

SUBMIT TO GRADESCOPE BY 10:00PM ON MONDAY, JANUARY 23:

Section 1.5 Problem 39

HOMEWORK 3

Lecture 6:

Section 1.6 (Continuity)

Problems 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, 31, 33, 35, 37, 39, 47, 49, 57, 61, 65, 67

Lectures 7 and 8:

Section 2.1 (The Derivative and the Slope of a Graph)

Problems 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 25, 27, 29, 31, 33, 35, 39, 41, 47, 49, 53, 55, 57, 59, 69, 71

SUBMIT TO GRADESCOPE BY 10:00PM ON MONDAY, JANUARY 30:

Section 1.6 Problem 29

HOMEWORK 4

Lecture 9:

Section 8.1 (Radian Measure of Angles)

Problems 1, 7, 11, 13, 15, 17, 23, 25, 27, 29, 33, 35, 39, 45, 55, 57

Section 8.2 (The Trigonometric Functions)

Problems 1, 5, 7, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, 31, 33, 35, 49, 51, 53, 55, 57, 59, 61, 63, 71, 73, 77, 81

Section 8.3 (Graphs of Trigonometric Functions)

Problems 1, 11, 27, 29, 35, 39

Lecture 10:

Section 2.2 (Some Rules for Differentiation)

Problems 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 27, 29, 31, 33, 37, 39, 41, 43, 45, 49, 51, 53, 55, 57, 59, 61, 63, 65, 67, 69, 71, 73, 81

Lecture 11:

Section 2.3 (Rates of Change: Velocity and Marginals)

Problems 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, 31, 33, 35, 41

SUBMIT TO GRADESCOPE BY 10:00PM ON MONDAY, FEBRUARY 6:

Section 2.3 Problem 33

HOMEWORK 5

Lecture 12:

Section 2.4 (The Product and Quotient Rules)

Problems 1, 3, 7, 9, 11, 13, 17, 21, 25, 27, 29, 31, 33, 39, 41, 43, 45, 49, 53, 55, 61, 63, 65, 69, 71, 73

Lecture 13:

Section 8.4 (Derivatives of Trigonometric Functions)

Problems 1, 3, 5, 7, 9, 11, 13, 15, 17, 21, 23, 25, 29, 31, 33, 35, 37, 41, 43, 45, 51, 77, 85, 87

SUBMIT TO GRADESCOPE BY 10:00PM ON MONDAY, FEBRUARY 13:

Section 8.4 Problem 43

HOMEWORK 6

Lecture 14:

Section 2.5 (The Chain Rule)

Problems 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, 31, 33, 35, 37, 47, 49, 51, 53, 55, 57, 59, 61, 63, 65, 67, 69, 71, 73

Lecture 15:

Section 2.6 (Higher Order Derivatives)

Problems 1, 3, 5, 7, 9, 11, 13, 17, 19, 21, 23, 25, 27, 29, 31, 35, 39, 43

Lecture 16:

Section 2.7 (Implicit Differentiation)

Problems 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, 31, 33, 35, 37, 47

SUBMIT TO GRADESCOPE BY 10:00PM ON WEDNESDAY, FEBRUARY 22:

Section 2.6 Problem 29

HOMEWORK 7

Lecture 17:

Section 2.8 (Related Rates)

Problems 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25

Lecture 18:

Section 3.1 (Increasing and Decreasing Functions)

Problems 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, 31, 33, 35, 37, 39, 41, 43, 45, 47

SUBMIT TO GRADESCOPE BY 10:00PM ON MONDAY, FEBRUARY 27:

Section 3.1 Problem 43

HOMEWORK 8

Lectures 19 and 20:

Section 3.2 (Extrema and the First Derivative Test)

Problems 1, 3, 5, 7, 9, 11, 19, 21, 23, 25, 27, 29, 31, 33, 39, 41, 43, 47, 49

Lecture 21:

Section 3.3 (Concavity and the Second-Derivative Test)

Problems 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, 31, 33, 39, 41, 43, 43, 47, 49, 51, 53, 55, 57, 59, 63, 69, 71, 73

SUBMIT TO GRADESCOPE BY 10:00PM ON MONDAY, MARCH 6:

Section 3.3 Problem 23

HOMEWORK 9

Lecture 22:

Section 3.4 (Optimization Problems)

Problems 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, 31, 33, 35

Lecture 23:

Section 3.7 (Curve Sketching: A Summary)

Problems 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 37, 39, 41, 43

SUBMIT TO GRADESCOPE BY 10:00PM ON MONDAY, MARCH 13:

Section 3.4 Problem 29

HOMEWORK 10

Lecture 24:

Section 3.8 (Differentials)

Problems 1, 3, 5, 13, 15, 17, 19, 21, 23, 25, 27, 29, 31, 33, 35, 37, 39, 41, 43

NO PROBLEMS TO SUBMIT FOR THIS HOMEWORK!