

# Study Guide for Test 1, Math 125

(The test will be on Friday, March 14, and covers material from Chapters 3, 4, 5, 8, 9, 10, 11, and 12.)

Math 125 *Kovitz* Spring 2025

- **The Histogram.**

Chapters 3.1 to 3.3, pages 31 to 42: boxes on pages 32, 37, and 41.

- **The Average and the Standard Deviation.**

Chapters 4.2 and 4.6, pages 58 to 60 and pages 71 to 72: example 2 on page 72; boxes on pages 59 and 71; pages 72–73, problems 1 and 5 (a); page 74, problem 1 (a); page 75, problem 7; page 106, problem 6; summary on page 76: point 2.

- **The Normal Approximation for Data.**

Chapters 5.1 to 5.5, pages 78 to 91: example 1 on page 80 and example 10 on page 90; box on page 79; page 82, problems 1 and 2 (a); page 84, problem 1(b); page 92, problem 3; page 94, problems 3 and 4; page 94, problem 6 and 7 (b); summary on page 96: points 2 and 4.

- **Computing the Correlation Coefficient.**

Chapter 8.4, pages 132 to 133: example 1; box on page 132; page 134, problems 1 (a) and 1 (b); page 137, problems 9 (a) and 9 (b); page 266, problem 11 (a); summary on page 140: point 7.

- **More about Correlation.**

Chapter 9.1 and 9.5, pages 141 to 143 and pages 150 to 152; boxes on pages 143 and 150; page 143, problems 2–4; page 152, problem 3; page 154, problem 6; summary on page 157: points 1 and 5.

- **The Regression Method.**

Chapters 10.1 and 10.3, pages 158 to 161, and pages 165 to 166: example 1 on pages 165 to 166; both boxes on page 160; page 161, problems 1, 2 (a), 2 (b), and 4; page 167, problem 1 (a); page 176, problems 2 (b), 3(a), 4(a), and 4(b); page 568, problem 10; summary on page 178: point 1.

- **The Regression Effect.**

Chapter 10.4, pages 169 to 173; box on page 169; page 178, problem 10; page 199, problem 7.

- **The R.M.S. Error for Regression.**

Chapter 11.1, pages 180 to 183; box on page 182; Figure 3 on page 183; page 184, problem 7; summary on page 201: point 4.

Examples from HWs, quizzes and practice sets: on next page.

**Practice for Quiz 1:** 3.

**Quiz 1:** 2.

**Practice for Test 1:** all.

**HW2:** Problem 13 (b).

**HW3:** Problems 1, 4.

**HW4:** Problems 1a, 2a, 3ab, 6.

**WeBWorK HW 2:** Problems 2, 8b.

**WeBWorK HW 3:** Problems 5, 8.

**WeBWorK HW 4:** Problems 1 (a), 3, 4, 6 (a), 6 (b).