

MATH 544 — Fall 2020— Notes about EXAM 3

- (1) Exam 3 is on Monday, November 16, 2020. The exam covers sections 1, 2, 3, 6, 7, 8, 10, 11 of Chapter 1, sections 2, 3, 4, 5 of Chapter 2, and sections 2, 3, 4, 5 of Chapter 4. This is the material in the Class Notes from page 1 to page 49.
- (2) **Be sure to MASTER all of the assigned homework.**
- (3) Be sure to MASTER all of the quizzes.
- (4) The material on the old **MATH 544** exams which is covered on your exam 3:¹
 - Exam 1's:
 - 97: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10.
 - 98: 1, 2, 3, 4, 5, 6, 7, 8, 9.
 - 01: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10.
 - 02: 1, 2, 3, 4, 5, 6, 8, 10.
 - spring 03: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10.
 - summer 03: 1, 2, 3, 4, 5, 6, 7, 8, 9.
 - 04: 1, 2, 3, 4, 5.
 - summer 05: all
 - fall 05: all
 - summer 06: 1, 2, 3, 4, **5** 6, 7.
 - fall 06: all
 - summer 07: 1, 2, 3, 4, 5, 6, 7.
 - fall 09: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12.
 - spring 11: 1, 2, 3, 4, 5, 6, 7, 8, 9.
 - summer 12: all
 - spring 16: all
 - fall 20: all
 - Exam 2's:
 - 97: 1, 2, 3, 4, 5, 6, 7, **8, 9, 10**.
 - 98: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10.
 - 01: 1, 2, 7, 8, 9, 10.
 - 02: 1, 6, 7.
 - spring 03: 1, 2, 3, 4a, 4b, 4c, 4d, 4e, 5, 6, 7, 8.
 - summer 03: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10.
 - 04: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10.
 - summer 05: 1, 2, 3, 4, 5, 6, 7.

¹I used boldfaced for problems that are about material that we learned about since exam 2. Every exam has a problem of the form, “Find bases for the row space, column space, and null space of this matrix.” It is not necessary to practice each one of them. It is significantly more important to figure out the more theoretical problems.

- fall 05: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10.
- summer 06: **1**, 3a, 3b, 4, 5, **6, 7**, 8, 9.
- fall 06: 1, 2, 3, 4, 5, 6, 7, 8, 9.
- summer 07: 1, 2, 3, 4, 5, 6, 7, 8, 9.
- fall 09: **1**, 2, 3, **4**, 5, 6, **7**.
- spring 11: 1, 2, 3, 4, 5, 6, 7, 8, 9.
- summer 12: 1, 2, 3, 4, 5, 6, 7, 8.
- spring 16: 1, 2, 3, 4, 5, 6, 7.
- fall 20: all.
- Exam 3's:
 - 97: **1, 3**, 4, 5, 6, 7, 8.
 - 98: 1, 2, **3, 4**, 5, 6, 7, **8, 9**.
 - 01: 3, 4, 5, 8, 9, 10.
 - 02: **1**, 2, 3, 4, 6, **7, 8, 9**, 10.
 - Spring 03: 1, 2, **3, 6**, 7a, 7b, **7c**, 8, **9**.
 - summer 03: 1, 2, 3, **4**, 5, 6, 7, 8, **9**.
 - summer 04: **1**, 2, **3**, 4, 5, 6, 7, 8, **9**.
 - summer 05: **1, 2**, 3, 4, **5**, 6, 7.
 - fall 05: **1**, 4ab, **4c**, **5, 6, 7, 8**, 9, 10.
 - fall 06: 1, **2**, 3, 4, **5, 6**, 7a, **7b**, 7c, **7d**.
 - su 07: **1, 2, 3**, 4, 5, **6**.
 - fall 09: 2, 7.
 - sp 11: **1, 2**, 3, **4**, 5, 6, 7, 8.
 - summer 12: **1, 2, 3, 5**.
 - sp 16: **1, 2, 3, 4, 5**.
- Exam 4's:
 - 98: 2, 4, 5, 7.
 - su 01: **1**, 2, 3, 4, 5, 8, **9, 10**.
 - sp 02: **2, 6, 8, 9**.
 - sp 03: 5, 8.
 - su 03: **1, 2, 5**, 6.
 - su 04: 2, **3**, 4, 5.
 - su 05: **1**, 2.
 - f05: 3, 7, 8, 10.
 - f06: **2, 9**.
- Final Exams:
 - 97: 3, 4, **5, 6, 7, 8, 9** (The matrices A and b are given before problem 6.), 13, 14, 15, 16.

- 98: 2, 4, 5, 6, **7**, 11, 12, 14, 17.
- 01: 2, 3, 4, **7**, 8, 9abc, **10abcd**, 10e, 10f, 13.
- 02: 3, **5, 8, 11**, 14, 15, 16.
- spring 03: **2, 3, 4, 5, 6**, 10, 11, 12, 14, 16, 17, **18**, 19.
- summer 03: **1, 2, 3, 4, 6, 7**, 11, 12, 16, 17**abcdefgh**.
- 04: 1**abcdefg**, 4, 6, 8, **10** 12, 13, **14**.
- summer 05: 1**abcdefg**, **2, 5, 8, 9, 10**.
- fall 05: 1**abcdefg** **2, 3**, 6, 9, **14, 15**, 16.
- summer 06: 1, 2, 3**abcdefgh**, **6, 8, 9**, 10, 12.
- fall 06: 1, 2, **3**, 6**abcdef**, 11.
- summer 07: **1, 2, 4, 5, 6**.
- fall 09: 1, 2, **3**, 6, 7, **10, 11, 12, 15**.
- spring 11: 1, 2, 3, **4, 5, 14**.
- summer 12: **1, 4, 7, 8, 9, 10**.
- sp 16: 1, 2, 3, 6, 7 **8**.