18.014 UNIT III: LIMITS AND CONTINUITY

Tuesday, Sept. 26.

Recitation: Indefinite integrals.

Read: 2.18 up to definition of a convex function.

Do: p. 124: 1, 6.

Lecture: Limits and continuity.

Read: 3.1–3.3; 3.4 to middle of p. 133; Notes F.

Do: p. 138: 1–8, 11–14 (give reasons), 28, 29, 30, (31 optional).

Thursday, Sept. 28.

Lecture: Proofs of limit theorems.

Read: 3.5, 3.7.

Do: p. 142: 1–6, 11, 12, 19, 22.

Friday, September 29: QUIZ 1

Tuesday, October 3.

Lecture: Intermediate value theorem.

Read: 3.9–3.12.

Do: p. 145: 1, 2a, 5, 6; p. 149: 2, 3, 5; p. F.2: 2.

Thursday, October 5.

Lecture: Inverse functions; rational exponents.

Read: 3.13 (Notes G optional).

Do: p. H.8: 1, 2, 3, 4, 5; p. 155: 7.

Friday, October 6.

Lecture: Small-span and extreme-value theorems.

Date: Fall 2000.

Read: H.1–H.7.

Do: p. H.9: 6, 7, 8b, 9 (10 optional).

Hand in Friday, October 6 in lecture (7 points/problem).

1. D.10: 4a.
2. D.10: 4b.
3. p. 138: 21 (give reasons).