

18.014 UNIT V: ELEMENTARY FUNCTIONS; INTEGRATION TECHNIQUES

Thursday, Oct. 26.

Lecture: Integration by substitution and by parts.

Read: 5.6–5.9 (skip Theorem 5.5, p. 219).

Do: p. 216: 2, 6, 8, 12, 14; p. 220: 2, 6, 8, 11a.

Friday, Oct. 27.

Lecture: Logarithms and exponentials.

Read: Notes M; the integration examples on pp. 234–235 and p. 247.

Do: M.11: 1,2; p. 236: 5, 7, 11, 16, 17.; p. 248: 3, 5, 7, 11, 13, 21, 25, 28, 32.

Tuesday, Oct. 31.

Lecture: Inverse trig functions, trig substitution.

Read: 6.21, p. 266, N.1–N.3.

Do: p. 256: 12, 17, 18, 19, 30, 31, 33, 35; p. N.5: 1, 2, 3, 4.

Thursday, Nov. 2.

Lecture: Integration techniques.

Read: 6.23, N.4.

Do: p. 236: 18, 22, 24; p. 249: 17, 18; p. 267: 7, 11, 19, 20, 33, 34, 35. (Don't bother finding A , B , C , ... in the partial fractions decompositions.)

Hand in Friday, November 3 in lecture (7 points/problem).

1. p. L.6: 5.
2. p. M.4: 1.
3. p. N.5: 6.