Sample Problems - 7th Edition Problem List

The following are practice problems taken from the course textbook (unless otherwise stated). These have been chosen to help you practice your skills and prepare for the tests. It is strongly recommended that you do these problems as the course progresses, as it is very easy to fall behind in this material.

- **Practice Problems**
  (*Testable Material*)

  - Section 7.5
  $7, 9, 15, 45, 73$

  - Section 7.8
  14[ans: convergent, 2/e] , $17, 25, 29, 31, 32, 40$[ans -4], $53, 57, 58$[ans: p $> 1, 1/(p - 1)$]

  - Chap. 7 Review
  $7, 11, 15, 45$

  - Appendix E
  $38, 41, 47$ (*use induction*)

  - Section 11.1
  $9, 15, 17, 27, 31, 33, 35, 41, 49, 73, 77, 80, 81$

  - Section 11.2
  $15, 17, 19, 23, 25, 35, 42$[ans: divergent], $45, 47, 57, 59, 67$

  - Section 11.3
  $23, 24$[ans: convergent], $29, 37$(a,c,d),40 [ans:n > e^100]

  - Section 11.4
  $3, 5, 7, 9, 13, 15, 19, 25$

  - Section 11.5
  3-13(*odd only*) $23, 25$

  - Section 11.6
  $5, 9, 12$[ans: absolutely convergent], $17, 21, 23, 29, 35$

  - Section 11.7
  $1, 7, 13, 19, 21$

  - Section 11.8
  $3, 5, 11, 15, 17, 23, 27, 29, 30$

  - Section 11.9
  $5, 7, 9, 13, 15, 25, 40$

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  - Section 11.10
  $5, 7, 9, 16, 17, 25, 41$(no graph required), $47, 49, 63$

  - Section 11.11
  $9, 15, 25, 27$

  - Section 8.2
  1(a), $7, 10, 11, 13, 14, 25$

  - Section 8.3
  $1, 3, 5, 9, 13, 15$

  - Section 9.1

3, 4[ans: ±5/2], 9, 11, 13, 15

- Section 9.3
  9, 15, 19, 20[ans:1/(exp(-x)+1)], 29, 39, 45

- Section 3.8
  3, 9, 11, 12, 15

- Section 9.5
  7-15(*odd only*), 29, 33

- Section 10.1
  1, 3, 7, 11, 15, 19, 24 [ans: a-3, c-4, d-2, b-1], 25

- Section 10.2
  7, 11, 19, 33, 41, 43, 51, 61

- Section 10.3
  3, 5, 7, 11, 17, 19, 21, 25, 29, 31, 37, 54[ans: a-5,b-2,c-6,d-3,e-1], 63

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- Section 14.1
  9-13 (*odd only*), 15, 19, 31(*odd only*), 32[ans: VI,V,I,IV,II,III], 43-47, 51,
  59-64

- Section 14.2
  5-17 (*odd only*), 29-33, 37

- Section 14.3
  5, 6, 7, 10, 11, 15-35,(*odd only*), 47, 49, 51, 53, 59, 65, 67, 75, 77, 81

- Section 14.4
  1, 3, 5, 11, 13, 19, 21, 27, 31, 33

- Section 14.5
  3-13(*odd only*), 14[ans:52,34], 23, 25, 27, 29, 35, 49, 51

- Section 14.6
  15, 19, 21, 29, 31, 33, 39

- Section 15.1
  1, 3, 5, 9, 11, 13

- Section 15.2
  3-9(*odd only*),4, 9, 20 [ans: 2ln(2)-1], 21, 25, 27, 35

- Section 15.3
  7, 9, 11, 15, 22, 23, 43-51(*odd only*) 59

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