

Math 252 Suggested Homework: Zill, 10th Edition

(Updated Dec. 2015)

1.1	1, 3, 5, 7, 29, 31
1.2	1, 3, 9, 11, 25, 27
2.2	5, 7, 9, 11, 13, 15, 17, 21, 23, 25
2.3	5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 27, 29, 33, 53 omit interval of soln
2.4	3, 5, 7, 9, 11, 15, 21, 23, 25, 27, 31, 33, 35, 37 for 17, 19, 33
2.5	1, 5, 7, 9, 11, 13, 17, 19, 23, 25, 27, 37 For #37: Refer to 2.4 #45 for initial conditions, and to check your answer.
3.1	3, 11, 13, 16, 19, 21, 27, 35 and 9 Answer to #16: 9.02 min
4.2	3, 7, 9, 11, 13, 15
4.3	3, 5, 7, 9, 11, 13, 15, 17, 21, 23, 29, 31, 35 , 43, 45, 47* (see answers below)
4.4	5, 7, 9, 13, 19, 21, 27, 29, 31, 45 a) d)
4.6	3, 5, 11, 13, 15, 17, 21
4.7	odds 1-29 ← omit 15, 17
5.1	11, 21, 27, 29, 17, 19
6.2	9, 11, 13, 15, 19, 21, 23 <u>try also 6.1: 27, 29 for skill-builder</u> Just find the first few coefficients; don't give answers in sigma notation.
7.1	23, 25, 27, 37, 39 For #37 and 39: Use the Laplace transform formula sheet
7.2	1, 3, 7, 13, 15, 17, 19, 23, 25, 27, 29, 31, 33, 35, 37
7.3	1, 3, 7, 9, 11, 13, 17, 25, 27, 29, 39, 41, 43, 45, 47, 55, 57, 59, 63, 67
7.4	1, 3, 7, 11, 13, 19, 23, 27, 31, 33, 49
7.5	odds 1-11
8.1	1, 7, 11, 21
8.2	1, 7, 13, 19, 21, 23, 27, 33, 41 Caution: Eigenvectors are not unique. Neither are vectors P and Q. Correct answers may look different than what appears in the back of the book.
8.3	11, 13, 15, 17

Section 4.3: Answers to 43: a), f) because they have at least one exponential growth term
 45: e) because it has a decaying sine wave
 47: d) because it is a sine wave with period 2π

Section 4.4: Answers to 45a) (v) because curve is $y = \text{sine curve} + e^x \text{ sine curve}$
 d) (i) because curve is $y = \text{constant} - \text{cosine curve}$