

Math 252 Suggested Homework: Zill, 9th 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, 25 , 27, 29, 47 omit interval of sol'n for
2.4	3, 5, 7, 9, 11, 15, 21, 23, 25, 27, 31, 33, 35, 37 17, 19, 29
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
6.1	19, 21, 23, 25, 29, 31, 33 and 9, 11 for skill-builder 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 45 a) (v) because curve is $y = \text{sine curve} + e^x \text{sine curve}$
 d) (i) because curve is $y = \text{constant} - \text{cosine curve}$