# MATH 242 - Spring 2024

section 1.1, page 8:    11, 16, 26, 30, 36, 45, 46.

section 1.2, page 15:   6, 7, 10, 16, 32, 33.

section 1.3, page 25:   11, 13, 15. The instructions for these problems are "What does the existence and uniqueness theorem tell you about this Initial Value Problem, if anything?"

section 2.4, page 114:  1 (You only have to take h=1/4.)

section 1.4, page 40:   9, 13, 21, 24, 35 (refer to example 4), 37 (continuously compounded interest is discussed on the bottom of page 35), 43 (refer to example 5).

section 2.3, page 101:  1, 2, 3, 7.

section 1.5, page 53:   13, 21, 25, 33, 37.

section 1.6, page 70:   1, 3, 14, 15, 17, 18, 19, 20, 21.

section 2.1, page 82:   9, 15, 16, 18, 19, 32, 33.

section 2.2, page 93:   1, 3, 5, 7, 9, 11. (You can ignore the instruction about slope fields.)

section 3.1, page 149:  2, 17, 18, 19, 20, 22, 29.

section 3.2, page 159:  3, 4, 14, 16, 21, 26.

section 3.3, page 172:  1, 3, 5, 11, 13, 17, 35, 49.

section 3.4, page 183:  15, 17, 19, 21 (The instructions for these problems are: Find $x(t)$; write your answer in the form $x(t) = Ce^{-pt}\cos(\omega t - \alpha)$ when this makes sense; and sketch the graph of $x = x(t)$.)

section 3.5, page 197:  2, 3, 5, 6, 33, 37, 39, 43.

section 3.6, page 208:     1, 3, 7.

section 7.1, page 457:     1, 2, 3, 5, 7, 9, 11, 13, 17, 23, 25, 27, 29.

section 7.2, page 469:     1, 7, 17, 21, 23, 31.

section 7.3, page 478:     1, 3, 5, 7, 9, 13, 19, 27, 33, 37.

section 7.4, page 487:     1, 2, 3, 7, 8, 9, 14, 15, 16, 17, 19, 20, 23, 24, 25, 26, 28, 29, 30.

section 7.5, page 497:     31, 33, 35.