| Section | Title | HW Trench (pdf page = publisher page +10 ) | HW Lebl |
| :---: | :---: | :---: | :---: |
| 1 | Introduction: Concepts and Terminology | pg. 14 \#1, 2(a, b, c, f), 3(a, b, c, e, f, g) | pg. 12 \#2.4, 2.5, 2.6, 2.103 |
| 2 | Initial Value Problems | pg. 14 \# 4(a, b, c, e), 5(a, d), 6(a, b, c) | pg. 12 \# 2.7, 2.8 |
| 3 | First Order Equations: Separation of Variables | pg. 52 \#1, 2, 3, 4, 5, 6, 11, 12 | pg. 26 \#3.101, 3.102, 3.103, 3.104, 3.105 |
| 4 | First Order Equations: Linear | pg. 41 \#1--5, 16--21 | pg. 30 \#4.4, 4.5, 4.6, 4.101, 4.102 |
|  | Special First Order | pg. 68\#1, 2, 7--10, pg. 82 \#37(a, b, c), pg. 91 \#3--15odd | pg. 35 \#5.101, 5.103 |
| 5 | First Order Equations: Models and Applications | pg. 53 \#29; pg. 138 \#1, 3, 17; | pg. 31 \#4.103, 4.104 |
| 6 | Linear Equations: Theory and Terminology | pg. 203 \#1, 2, 5(all) | pg. 50 \#2.1.101, 2.1.102 |
| 7 | Reduction of Order | pg. 205 \# $10,11,13,14,16,17,18$ | pg. 50 \#2.1.9, 2.1.104 |
| 8 | Homogeneous Equations with Constant Coefficients | pg. 217 \#1--17 | pg. 56 \#2.101, 2.102, 2.103, 2.104; pg. 61 \#3.1, 3.2, 3.3 |
| 9 | Method of Undetermined Coefficients | pg. 235 \#1--19odd, 31, 32, 33, 34, 35, 36 | pg. 75 \#5.2, 5.3, 5.4, 5.5, 5.6 |
| 10 | Variation of Parameters | pg. 262 \#1--6, 7--12, 30, 31 | pg. 76 \#5.101, 5.102, 5.103, |
| 11 | Linear Mechanical Equations | pg. 277 \#2, 3, 4, 7, 11, 13; pg. 288 \#1, 5, 6, 13, 17 | pg. 68 \#4.2, 4.3; pg. 83 \#6.103 |
| 12 | LRC Series Circuits | pg. 295 \#1, 3, 5, 6 | pg. 69 \#4.102 |
| 13 | Laplace Transform | pg. 403 \#1 (a, b, d, e), 2(b, c, f, h, i), 5 (b, c), 16 | pg. 255 \#1.5, 1.6, 1.7, 1.8, 1.101, 1.103 |
| 14 | Inverse Laplace Transform | pg. 412 \#1(d), 2(d, f, i, j, k), 4(a), 7(a), | pg. 255 \#1.9, 1.10, 1.102 |
| 15 | Shift Theorems | pg. 412 \#1(a, b, c), 2(a, b, e, h, l), 7(b, c); pg 428 \#1, 2, 5, 6, 10, 19, 20, 23, 24 | pg. 255 \#1.11, 1.13, |
| 16 | Laplace Transforms of Derivatives and IVPs | pg. 419 \#1-19odd; pg. 438 \#1, 3, 4, 5, 14 | pg. 262 \#2.6, 2.7, 2.11 |
| 17 | Fourier Series: Trigonometric Series | pg. 599 \#4, 15 | pg. 165 \#2.3, 2.4, 2.6, 2.102, 2.104 |
| 18 | Sine and Cosine Series | pg. 614 \#1, 4, 11, 13, | pg. 182 \#4.101, 4.102, 4.104; pg. 189 \#5.5 |

Errata: The solution to 1.2 .4 e in Trench (pg. 714 of the pdf ) is missing a term $+5 \mathrm{x} / 4$
The solution to 6.1.3 in Trench (pg. 741 of the pdf) has a sign error. It should be either $-1.5 \ldots \mathrm{~cm}$ or $-0.015 \ldots \mathrm{~m}$.
In Trench problem 6.3.1 (solution on pg. 742 of pdf), the sqrt(15) inside the cosine is a typo, it should be sqrt(31).
Also in Trench problem 6.3.5 (solution also on pg 742), the coefficients are wrong. The coefficients of the cosine and sine terms, respectively, should be 2 and $242 / 3$.
Section 4 exact equations, in Trench 37(a) (pg 82) the answer in the back should read $2 x^{\wedge} 2+x^{\wedge} 4 y^{\wedge} 4+2 y^{\wedge} 2=c$. The coefficient on $y^{\wedge} 2$ should be 2 .

