

# PHYS 3492 - MATHEMATICS FOR SCIENTISTS AND ENGINEERS II PROBLEMS

Disclaimer: The following is a list of problems from Boas that *barely sample* the material that we'll be covering this semester. (There are literally hundreds of problems for each chapter.) You should probably do *many more* problems to really understand the material. Don't be surprised if you see some of these problems on the tests. But there will be other questions as well. *My advice is to do as many problems as possible; not just those listed here.*

| Chapter | Problems  |
|---------|---|
| Chpt 7  | 5.1, 5.2, 5.9, 5.11, 5.12, 5.13, 6.13, 6.14, 6.15, 7.12, 7.13, 8.10, 8.15, 9.1, 9.6, 9.9, 9.15, 9.23, 10.4, 10.5, 10.6, 11.3, 11.5, 11.7, 12.3, 12.5, 12.6, 12.11, 12.18, 12.21, 13.3, 13.21  |
| Chpt 8  | 2.1, 2.3, 2.8, 2.13, 3.1, 3.2, 3.5, 3.12, 4.1, 4.3, 4.4, 4.7, 4.11, 4.15, 5.7, 5.9, 6.4, 6.12, 6.13, 6.18, 6.23, 7.2, 7.4, 7.5, 7.25, 8.4, 8.9, 8.10, 8.11, 9.2, 9.4, 9.23, 9.28, 10.1, 10.3, 10.9, 10.14, 10.16, 11.1, 11.3, 11.6, 11.7, 11.9, 12.1, 12.2, 12.3, 12.6, 12.8  |
| Chpt 9  | 1.1, 1.2, 1.3, 2.1, 2.2, 2.3, 2.5, 3.1, 3.2, 3.15, 3.16, 3.18, 4.1, 4.3, 5.1, 5.2, 5.3, 5.4, 5.5, 5.8, 5.11, 5.21, 6.1, 6.2, 6.4, 6.7, 8.1a, 8.1c, 8.8, 8.19, 8.22, 8.28  |
| Chpt 11 | 3.1, 3.2, 3.5, 3.8, 3.14, 3.17, 5.1, 5.4, 6.1, 6.2, 7.1, 7.3, 7.7, 8.1, 8.3, 9.2, 9.4, 10.1, 10.2, 10.3, 11.1, 11.3, 11.4, 11.5, 12.1, 12.2, 12.3, 12.4, 12.5, 12.6, 12.7, 12.14, 12.15, 12.17, 12.22, 13.2, 13.5   |
| Chpt 12 | 1.1, 1.4, 1.5, 2.1, 2.2, 2.3, 2.4, 3.1, 3.3, 3.6, 4.1, 4.2, 4.3, 5.2, 5.3, 5.4, 5.5, 5.6, 5.7, 5.9, 5.10, 5.14, 6.2, 6.5, 6.7, 7.1, 7.2, 7.4, 7.5, 8.1, 8.2, 8.6, 9.1, 9.2, 9.16, 10.1, 10.2, 10.3, 10.4, 10.7, 10.8, 10.9, 10.10, 11.1, 11.2, 11.4, 11.14, 12.1, 12.2, 12.4, 12.7, 12.9, 13.1, 13.2, 13.3, 13.5, 14.1, 14.2, 14.3, 14.4, 14.5, 15.1, 15.2, 15.3, 15.7, 16.13, 17.2, 17.4, 17.6, 17.10, 18.1, 18.2, 18.3, 18.4, 18.5, 18.6, 18.7, 18.8, 19.1, 19.2, 19.3, 21.1, 21.2, 21.5, 21.11, 22.1, 22.2, 22.5, 22.6, 22.7, 22.10, 22.12, 22.14, 22.15, 22.16, 22.19, 23.19, 23.20, 23.23, 23.24 |
| Chpt 13 | 1.1, 1.2, 1.3, 2.1, 2.5, 2.10, 2.11, 2.14, 2.16, 3.2, 3.3, 3.4, 3.7, 3.10, 3.11, 4.1, 4.2, 4.5, 4.10, 4.11, 5.1, 5.2, 5.4, 5.9, 5.11, 5.12, 6.1, 6.2, 6.3, 7.1, 7.7, 7.9, 7.15, 7.16, 8.1, 8.2, 8.3, 8.4, 8.7, 8.8, 9.4   |
| Chpt 14 | 1.1, 1.3, 1.4, 1.13, 1.18, 1.21, 2.1, 2.3, 2.4, 2.13, 2.18, 2.21, 2.22, 2.29, 2.31, 2.34, 2.35, 2.36, 2.41, 2.44, 2.45, 2.46, 2.48, 2.49, 2.50, 2.54, 2.55, 2.59, 3.1, 3.3, 3.6, 3.13, 3.17, 3.21, 3.22, 4.2, 4.3, 4.5, 4.9, 4.11, 5.1, 5.2, 5.3, 6.1, 6.3, 6.5, 6.6, 6.10, 6.12, 6.13, 6.14, 6.19, 6.20, 6.24, 6.37, 7.3, 7.10, 7.16, 7.21, 7.22, 7.28, 7.33, 7.37, 7.41, 7.42, 7.51, 7.56, 7.59, 8.1, 8.2, 8.3, 8.5, 8.12, 9.1, 9.2, 9.3, 9.4, 9.7, 9.9, 9.10, 9.11, 9.13, 9.14, 10.1, 10.2, 10.3, 10.4, 10.7, 10.10  |