

Homework Sets

Physics 321

- Homework 1a
 - Problem 3 from the *Coulomb's Law problems*
 - Problem 6 from the *Coulomb's Law problems*
 - Problem 12 from the *Coulomb's Law problems*
 - Problem 13 from the *Coulomb's Law problems*
 - Problem 20 from the *Coulomb's Law problems*
- Homework 1b
 - Problem 2 from the *Gauss's Law problems*
 - Problem 4 from the *Gauss's Law problems*
 - Problem 9 from the *Gauss's Law problems*
 - Problem 17 from the *Gauss's Law problems*
 - Problem 21 from the *Gauss's Law problems*
 - Your individual Problem from Chapter 1 of Purcell/Morin.
 - Your individual Exercise from Chapter 1 of Purcell/Morin.
- Homework 2a
 - Purcell/Morin 2.6
 - Purcell/Morin 2.31
 - Purcell/Morin 2.32
 - Purcell/Morin 2.34
 - Purcell/Morin 2.37
 - Problem 23 from the *Coulomb's Law problems*

- Problem 6 from the *Gauss's Law problems*
- Homework 2b
 - Purcell/Morin 2.28
 - Purcell/Morin 2.75
 - Purcell/Morin 2.76
 - Your individual Problem from Chapter 2 of Purcell/Morin.
 - Your individual Exercise from Chapter 2 of Purcell/Morin.
 - Problem 24 from the *Coulomb's Law problems*
 - Problem 8 from the *Gauss's Law problems*
- Homework 3a
 - Purcell/Morin 3.11
 - Purcell/Morin 3.17
 - Purcell/Morin 3.38
 - Purcell/Morin 3.52
 - Compute the vector line integral $\int \mathbf{F} \, d\mathbf{l}$ and the dotted line integral $\int \mathbf{F} \cdot d\mathbf{l}$ for the vector field \mathbf{F} and the path you are given.
 - Problem 25 from the *Coulomb's Law problems*
 - Problem 10 from the *Gauss's Law problems*
- Homework 3b
 - Purcell/Morin 3.25
 - Purcell/Morin 3.39
 - Your individual Problem from Chapter 3 of Purcell/Morin.
 - Your individual Exercise from Chapter 3 of Purcell/Morin.
 - Compute the flux integral $\int \mathbf{F} \cdot d\mathbf{a}$ for the vector field \mathbf{F} and the surface you are given.
 - Problem 26 from the *Coulomb's Law problems*
 - Problem 11 from the *Gauss's Law problems*

- Homework 4a
 - Problem 3 from *Charge and Current*
 - Purcell/Morin 4.1
 - Purcell/Morin 4.2
 - Purcell/Morin 4.19
 - Purcell/Morin 4.20
 - Compute the second flux integral $\int \mathbf{F} \cdot d\mathbf{a}$ for the vector field \mathbf{F} and the surface you are given.
 - Problem 12 from the *Gauss's Law problems*
- Homework 4b
 - Purcell/Morin 4.17
 - Purcell/Morin 4.29
 - Purcell/Morin 4.30
 - Problem 2 from *Charge and Current*
 - Your individual Problem from Chapter 4 of Purcell/Morin.
 - Your individual Exercise from Chapter 4 of Purcell/Morin.
 - Problem 13 from the *Gauss's Law problems*
- Homework 5a
 - Circuit problem that I describe in class
 - Problem 1 from *Lorentz Force Law problems*
 - Problem 3 from *Lorentz Force Law problems*
 - Problem 8 from *Lorentz Force Law problems*
 - Problem 14 from the *Gauss's Law problems*
- Homework 5b
 - Purcell/Morin 5.1
 - Purcell/Morin 5.10
 - Purcell/Morin 5.11

- Purcell/Morin 5.13
- Your individual Exercise from Chapter 5 of Purcell/Morin.
- Problem 15 from the *Gauss's Law problems*
- Homework 6a
 - Purcell/Morin 6.2
 - Purcell/Morin 6.31
 - Problem 3 from *Ampere's Law problems*
 - Problem 11 from *Ampere's Law problems*
 - Problem 14 from *Ampere's Law problems*
 - Problem 6 from *Biot-Savart Law problems*
 - Problem 16 from the *Gauss's Law problems*
- Homework 6b
 - Purcell/Morin 6.29
 - Purcell/Morin 6.30
 - Purcell/Morin 6.33
 - Purcell/Morin 6.42
 - Your individual Problem from Chapter 6 of Purcell/Morin.
 - Your individual Exercise from Chapter 6 of Purcell/Morin.
 - Problem 18 from the *Gauss's Law problems*
- Homework 7
 - Purcell/Morin 7.35
 - Purcell/Morin 7.42
 - Purcell/Morin 7.43
 - Your individual Problem from Chapter 7 of Purcell/Morin.
 - Your individual Exercise from Chapter 7 of Purcell/Morin.