**18.02ρ Problem Set 7**

*(Due Tuesday, November 8, 11:59:59 PM)*

**Part I  (100 points)**

HAND IN ONLY THE UNDERLINED PROBLEMS
*(The others are *some* suggested choices for more practice.)*

EP = Edwards and Penny; SN = Supplementary Notes (most have solutions)

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**Vector fields, curl, divergence**
Reading: EP §15.1, SN §§V1, V8
Exercises:
EP §15.1 11-14, 22, 28, 31, 32, 34, 36, 37, 38, 39
SN §6A 4

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**Line integrals in the plane and in space**
Reading: EP §15.2, SN §V11
Exercises:
EP §15.2 5, 8, 11, 12, 13, 18, 31, 33
SN §6D 2, 6

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**Path independence and conservative fields**
Reading: EP §15.3, SN §§V2, V11
Exercises:
EP §15.3 3, 6, 11, 30, 31, 35

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**Gradient fields and potential functions**
Reading: EP §15.3, SN §V12
Exercises:
EP §15.3 17, 23, 25, 34
SN §4C 2, 3
SN §6E 4, 6