18.02 Problem Set 5

(Due Thursday, March 17, 11:59:59 PM)

Part I (60 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)

Double and triple integrals in rectangular coordinates

Reading: EP §§14.1, 14.2, 14.3, 14.6 SN §I

Exercises:

EP §14.1 31

EP $\S 14.2\ 6, \underline{14}, 17, \underline{22}, \underline{28}$

EP §14.3 6, 17, 24, <u>33</u>, <u>37</u>, 42, <u>44</u>

EP §14.6 3, <u>7</u>, 17, <u>43</u>, 44, <u>48</u>

SN §3A 1, 3

Change of variables, double integrals in polar coordinates

Reading: EP §14.4, SN §CV

Exercises:

EP §14.4 3, 12, <u>15</u>, <u>29</u>, <u>34</u>

SN §3B 2, 4