MATH V1201 PROBLEM SET 7
DUE NOVEMBER 5, 2009.

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(1) In the textbook:
(§14.2) 35, 44
(§14.3) 6, 19, 24, 27, 36, 41, 57, 73, 87, 95
(§14.4) 3, 4, 12, 19, 41, 46 (you don't have to do 45)
(§14.5) 3, 7, 10, 36,
(2) Prove rigorously, using the ϵ-δ definition of limit, that:
   (a) $\lim_{(x,y)\to(0,0)} x + y + 2 = 2$.
   (b) $\lim_{(x,y)\to(0,0)} xy + 1 = 1$.
   (c) $\lim_{(x,y)\to(0,0)} \frac{x+y}{xy}$ does not exist.

If you had trouble with	Do problems
14.2.35	14.2.29–38
14.2.44	
14.3.6	14.3.5
14.3.19, 24, 27, 36	14.3.15–38
14.3.41	14.3.39–42
14.3.57	14.3.58–60
14.3.73	14.3.71, 72, 74
14.3.87	14.3.57–60
14.3.95	It is, indeed, tricky.
14.4.3, 4	14.4.1–6
14.4.12	14.4.11–16
14.4.19	14.4.20, 21
14.4.41	14.4.33–40
14.4.46	14.4.43, 44?
14.5.3	14.5.1–6
14.5.7, 10	14.5.8–12
14.5.36	14.5.35, 37, 38.

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