Home work # 1,
due on Friday, 04/19
(in my mailbox at Sloan, 253,
by 3:00 p.m.)

Abbreviations [D1] and [D2] mean:


- [D1], Ex. 6, p. 31 (the exercise concerns saddle-node bifurcations only!).

- Take $f, g \in C[a, b]$, $[a, b]$ being a finite interval, and put

$$d(f, g) = \int_b^a \frac{|f(x) - g(x)|}{1 + |f(x) - g(x)|} \, dx.$$ 

Prove that $d(., .)$ is a metric on $C[a, b]$.

- [D1], Ex. 7, p. 23.

- [D1], Ex. 8, p. 23.

- [D1], Ex. 3, p. 31.

- [D1], Ex. 5, p. 31.
