PDE, HW 2, due Friday 9/23/05

1. Construct subharmonic functions in $\mathbb{R}^n, n \geq 3$ that are bounded above, but not constant. Thus show that Liouville's theorem does not hold for subharmonic functions in $\mathbb{R}^n, n \geq 3$.

In addition, do the following problems in John's book.

    2, p. 101. (It is not necessary to include all details for (b), (e)).

    4, p. 106.

    5, p. 110.

    8, p. 110.

    9, p. 110.

3(a) , p.73.