## Math-5630/6630

 $\begin{array}{c} \hbox{Introduction to Numerical Analysis I} \\ \hbox{Summer 2007} \end{array}$ 

 $\operatorname{Quiz}\, 1$ 

1. All the following sequences converge to 0 as  $n \to \infty$ . Order them according to their rate of convergence for slowest to fastest.

$$\left\{\frac{1}{2^{n^2}}\right\} \qquad \left\{\frac{1}{2^n}\right\} \qquad \left\{\frac{1}{n}\right\} \qquad \left\{\frac{1}{2^{2^n}}\right\}$$