



## Practice Problem 3

*Physical Chemistry I*

*Fall 2003*

*M. Francl*

This is an optional practice problem for you to work. Answers will be posted on the web. If you desire some extra credit this term, you may hand in up to 5 of these for a total of 10 extra credit points added to your weekly problem set score. To receive extra credit, these must be handed in by the next class period.

Look at the entry on Hilbert space at MathWorld (<http://mathworld.wolfram.com/HilbertSpace.html>) and explain why Hilbert space is of interest to quantum mechanics.

### The Culture of Chemistry



*Die Fakultät ist keine Badeanstalt.*  
The faculty is not a pool changing  
room.

[On the proposed appointment of the  
first woman professor - Emmy  
Noether.]

**David Hilbert**

**Quoted in A L Mackay, *Dictionary of  
Scientific Quotations* (London 1994)**