Fixed point theorems are very common in many areas of math. In algebraic topology, these results are often comparisons of invariants defined using different techniques. For example, the Lefschetz fixed point theorem is the identification of algebraic and geometric invariants. I’ll describe an approach to these comparisons that is very different from the standard proofs. This perspective uses traces and has many advantages. One of the most important is that it generalizes easily. (Received September 20, 2010)