Definition. A pointed space \((X, x)\) is well-pointed is the inclusion of the basepoint \(\{x\} \hookrightarrow X\) is a cofibration.

Problem 4. Let \((X, x)\) be a well-pointed space. Show that the quotient map \(SX \rightarrow \Sigma X\) from the unreduced suspension of \(X\) to the reduced suspension of \(X\) is a homotopy equivalence.