Transistor-level NCL Design Example Problems

1) Design minimal static and semi-static transistor-level implementations of an NCL TH34w22 gate.

2) Design minimal static and semi-static transistor-level implementations of an NCL TH33D gate. Besides the *A*, *B*, and *C* inputs, there is also a *rst* input, that when asserted, causes output *Z* to become asserted, regardless of the *A*, *B*, and *C* inputs. The static version should have 18 transistors and the semi-static version 12 transistors.