

Homework 6

1. Show that the fermion content of $\mathbf{5} + \bar{\mathbf{10}}$ representation of $SU(5)$ reproduces a single generation of the Standard Model, under the symmetry breaking $SU(5) \rightarrow SU(3) \times SU(2) \times U(1)$.
2. Srednicki problem 84.1
3. Srednicki problem 86.1
4. Srednicki problem 87.3.