1. HIGHER ORDER INTERACTIONS

the example we're given is

$$\left[L^a \varepsilon_{ab} H^b\right]^2 = L^{a_1} \varepsilon_{ab} H^b \, L^{c_1} \varepsilon_{cd} H^d$$

An easy way to produce higher order interactions that are automatically invariant is to take a lower-order interaction & take powers of it.

eg. $\left[\left(L^a \varepsilon_{ab} H^b\right)^2\right]^2$ ← is DIMENSION - 10

(just squared a dim-5 interaction)

similarly, $\left(H^\dagger L \bar{E}\right)^2$ is DIM 8

$\left(H^\dagger L \bar{E}\right)^3$ is DIM 12

↑ using Yukawa as a basic unit

2. ALL HIGHER ORDER INTERACTIONS ARE (by definition) PRODUCTS OF FIELDS WHOSE TOTAL MASS DIMENSION IS > 4. THIS MEANS THAT THE COUPLING CONSTANT, eg $\frac{c}{\Lambda}(LeH)^2$, HAS NEGATIVE MASS DIMENSION. IN LEC 15 (OR IN THE ARTICLE CITED), WE SAW THAT COUPLINGS W/ NEGATIVE MASS DIMENSION ARE INVALID TAYLOR EXPANSION PARAMETERS @ SMALL DISTANCES.