

$\text{Ad}[0] = \text{Identity};$

$\text{Ad}[c_ \cdot a_{qu}][z_] := z / \cdot w_{QU} \Rightarrow e^{c_ \gamma \left(\text{Sum} \left[\frac{B[g_{QU}, a_{QU}]}{g_{QU}} \text{Count}[w, g], \{g, QU@Generators\} \right] \right)} w;$

$\text{Ad}[c_ \cdot b_{qu}][z_] := z / \cdot w_{QU} \Rightarrow e^{c_ \gamma \left(\text{Sum} \left[\frac{B[g_{QU}, b_{QU}]}{g_{QU}} \text{Count}[w, g], \{g, QU@Generators\} \right] \right)} w;$

$\text{Ad}[c_ \cdot QU[]][z_] := z;$