

$$D_i e_i = e_{i+1} D_i - e_{i+1}$$

$$D_i e_{i+1} = e_i D_i + e_{i+1}$$

$$D_i e_i^{-1} = e_{i+1}^{-1} D_i - e_i^{-1}$$

$$D_i e_{i+1}^{-1} = e_i^{-1} D_i + e_i^{-1}$$

$$D_i D_{i+1} D_i = D_{i+1} D_i D_{i+1}$$

$$D_i^2 = D_i$$