GLM Betas

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1 Log Link

$$log(\mu) = X\beta \tag{1}$$

$$log(\mu) = \beta_0 + X_1 \beta_1 + X_2 \beta_2 + X_3 \beta_3$$
 (2)

$$X_n = [1, 1, 0], X'_n = [1, 0, 1]$$
 (3)

$$\mu_n' = f(\mu_n)? \tag{4}$$

$$\mu_n = e^{X\beta} = e^{\beta_0 + X_1 \beta_1 + X_2 \beta_2 + X_3 \beta_3} = e^{\beta_0 + \beta_1 + \beta_2}$$
 (5)

$$\mu'_n = e^{\beta_0 + \beta_1 + \beta_3}, \beta_3 = \beta_2 + \Delta, \Delta = \beta_3 - \beta_2$$
 (6)

$$\mu_n' = \mu_n e^{\Delta} \tag{7}$$