

$$\begin{aligned} \frac{p}{1-p} &= b^{\beta_0} \cdot b^{\beta_1 x_1} \cdot \dots \cdot b^{\beta_i (x_i + 1)} \cdot \dots \cdot b^{\beta_n x_n} \\ &= b^{\beta_0} \cdot b^{\beta_1 x_1} \cdot \dots \cdot \underline{b^{\beta_i}} b^{x_i} \cdot \dots \cdot b^{\beta_n x_n} \end{aligned}$$