

(4)

□ Example 2: $\mu + \alpha_1$

$$\begin{bmatrix} 1 & 1 & 0 & 0 \end{bmatrix} \begin{bmatrix} \mu \\ \alpha_1 \\ \alpha_2 \\ \alpha_3 \end{bmatrix} = \mathbf{q}^T \mathbf{b}^{(0)}$$

Ex 3: $\mu + \frac{1}{2}(\alpha_2 + \alpha_3)$

$$\begin{bmatrix} 1 & 0 & \frac{1}{2} & \frac{1}{2} \end{bmatrix} \begin{bmatrix} \mu \\ \alpha_1 \\ \alpha_2 \\ \alpha_3 \end{bmatrix} = \mathbf{q}^T \mathbf{b}^{(0)}$$

□ Our interest: How are results of $\text{lm}()$ -output computed?

□ Estimate for intercept in lm -Output, corresponds to group-mean of Angus animals, because 'Angus' corresponds to first level name in alphabet