

$$\mathbf{M}_{3 \times 3} = \mathbf{X}^\top \mathbf{X} = \begin{pmatrix} 18 & 42 & 60 & 31 \\ 22 & 27 & 25 & 29 \\ 108 & 125 & 117 & 132 \end{pmatrix} \begin{pmatrix} 6649 & 3929 \end{pmatrix}$$

The matrix  $\mathbf{M}_{3 \times 3}$  is calculated as  $\mathbf{X}^\top \mathbf{X}$ , where  $\mathbf{X}$  is a  $3 \times 4$  matrix. The calculation involves the following steps:

- Row 1 of  $\mathbf{X}$ :  $18, 22, 108$
- Row 2 of  $\mathbf{X}$ :  $42, 27, 125$
- Row 3 of  $\mathbf{X}$ :  $60, 25, 117$
- Row 4 of  $\mathbf{X}$ :  $31, 29, 132$

The matrix  $\mathbf{M}_{3 \times 3}$  is calculated as  $\mathbf{X}^\top \mathbf{X}$ , where  $\mathbf{X}$  is a  $3 \times 4$  matrix. The calculation involves the following steps:

- Row 1 of  $\mathbf{X}$ :  $18, 22, 108$
- Row 2 of  $\mathbf{X}$ :  $42, 27, 125$
- Row 3 of  $\mathbf{X}$ :  $60, 25, 117$
- Row 4 of  $\mathbf{X}$ :  $31, 29, 132$

The matrix  $\mathbf{M}_{3 \times 3}$  is calculated as  $\mathbf{X}^\top \mathbf{X}$ , where  $\mathbf{X}$  is a  $3 \times 4$  matrix. The calculation involves the following steps:

- Row 1 of  $\mathbf{X}$ :  $18, 22, 108$
- Row 2 of  $\mathbf{X}$ :  $42, 27, 125$
- Row 3 of  $\mathbf{X}$ :  $60, 25, 117$
- Row 4 of  $\mathbf{X}$ :  $31, 29, 132$