

Example (continued)

The normal equations and their solution are

$$\begin{bmatrix} 7 & 14 \\ 14 & 56 \end{bmatrix} \begin{bmatrix} \hat{c} \\ \hat{m} \end{bmatrix} = \begin{bmatrix} 21 \\ 68 \end{bmatrix} \Rightarrow \begin{bmatrix} \hat{c} \\ \hat{m} \end{bmatrix} = \begin{bmatrix} \frac{8}{7} \\ \frac{13}{14} \end{bmatrix}$$

So here is the best fit and a graph:

$$\text{Best fit: } y = \frac{8}{7} + \frac{13}{14}x$$

