

**Problem 1.** Hej gubse du er en  $A : \mathbb{C} \rightarrow \mathbb{C}$ .

$\bar{a}^2$

Vi kan ogsaa lave multiline!

$$\alpha + \beta \tag{1}$$

$$= \text{grissemus} - \beta^2 \tag{2}$$

$$= 100! \tag{3}$$

**Problem 2.** Hesten er.

$$V := \{p \in \mathbb{Q}[x] \mid p \text{ has degree at most } 3\} \tag{4}$$

**Problem 3.** Du er en grissemus af vektoren

$$A \begin{pmatrix} \alpha \\ \beta \\ \gamma \end{pmatrix} = \begin{pmatrix} i\beta + 3\gamma \\ -i\alpha + 2\beta \\ 3\alpha - 2\gamma \end{pmatrix} \tag{5}$$

**Problem 4.** Vi kan ogsaa lave en stoor matrice!

$$\text{mus} = \begin{bmatrix} 0 & 1 & 0 & \cdots & \cdots & 0 \\ \vdots & 0 & 2 & 0 & \cdots & \vdots \\ \vdots & \vdots & \vdots & \ddots & \ddots & \vdots \end{bmatrix} \tag{6}$$

**Problem 5.** mus

$$\text{mus} = \begin{cases} \text{gris}^2 & \text{if mus} \equiv \text{gubse} \\ \text{ikke gris} & \text{otherwise} \end{cases} \tag{7}$$