Advanced Linear Algebra (MM853)

Problem 1. Hej gubse du er en $A : \mathbb{C} \to \mathbb{C}$.
$\overline{a}^2$
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 stooor matrice!
$$\text{mus} = \begin{bmatrix} 0 & 1 & 0\dots & \dots & & 0 \\ \vdots & 0 & 2 & 0 & \dots & \vdots \\ \vdots & \vdots & \vdots & \ddots & \ddots & \vdots \end{bmatrix} \tag{6}$$

Problem 5. mus
$$\text{mus} = \begin{cases} \text{gris}^2 & \text{if mus} \equiv \text{gubse} \\ \text{ikke gris} & \text{otherwise} \end{cases} \tag{7}$$