

### Assignment week 03 (Homework vault part)

**Deadline:** 26. 10. 2020

Upload scan, photograph, or a typesetted pdf of computation to the homework vault *Assignment week 02*. Do not forget to include your name and personal ID number (učo) on the page(s).

**Exercise 1.** Let

$$V = \begin{pmatrix} 1 \\ e^{i\frac{2\pi}{3}} \\ e^{-i\frac{2\pi}{3}} \end{pmatrix}$$

Compute both  $V^+V$  and  $VV^+$ .

**Exercise 2.** Compute

$$\det \begin{pmatrix} 1 & -i & -1+i \\ i & 1 & 1+i \\ 1+i & -1+i & 0 \end{pmatrix}.$$