

Homework on §22–25**Due: Thursday, May 2**

- A. Silverman 22.1.
- B. Silverman 22.3.
- C. Silverman 22.10.
- D. Silverman 24.4.
- E. Silverman 24.8.
- F. Recall that $D_m = \{d \in \mathbb{N} : d \mid m\}$. Use the Fundamental Theorem of Arithmetic to show that if $\gcd(m, n) = 1$, then the map

$$\begin{aligned} D_m \times D_n &\rightarrow D_{mn} \\ (d, e) &\mapsto de \end{aligned}$$

is a bijection.

- G. Silverman 27.1.