# Number Theory

### Alec Zabel-Mena

#### $\underline{\text{Text}}$

Irelnad, K. Rosen, M. A Classical Introduction to Modern Number Theory,  $2^{nd}ed$ . Graduate Texts in Mathematics; Springer-Verlag. 1998.

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### Chapter 1

## Unique Factorization.

- 1.1 Unique Factorization in  $\mathbb{Z}$ .
- 1.2 Unique Factorization in K[x].
- 1.3 Principle Ideal Domains.
- 1.4 Unique Factorization in  $\mathbb{Z}[i]$  and  $\mathbb{Z}[\omega]$ .