

Congruences

- 2.1. Basic congruences
- 2.2. The trouble with division
- 2.3. Congruences for polynomials
- 2.4. *Tests for divisibility*

2.5. Additional Exercises:

Binomial coefficients modulo p

The Fibonacci numbers modulo d

Appendix 2A. Congruences in the language of groups

- 2.6. Further discussion of the basic notion of congruence
- 2.7. Cosets of an additive group
- 2.8. A new family of rings and fields
- 2.9. The order of an element

Appendix 2B. The Euclidean algorithm for polynomials

- 2.10. The Euclidean algorithm in $\mathbb{C}[x]$
- 2.11. Common factors over rings: Resultants and discriminants
- 2.12. Euclidean domains