

## HOMEWORK 11 (DUE: 11:15 AM, DEC 7 FRI)

*Remark.* Note that the definition of rings in [Pin10] does *not* require that rings always have the unity. However, we will keep using our conventions, thus every ring should have the unity element. Also, similarly every ring homomorphism should send the unity to the unity.

1. Do Exercise 18.D.2–6 (except 1) in [Pin10].
2. Do Exercise 18.E.1,2, and 4 (not all) in [Pin10].
3. Do Exercise 18.H.1–5 in [Pin10].
4. Do Exercise 18.I.1–2 (not all) in [Pin10].

### REFERENCES

[Pin10] Pinter, C. C., *A Book of Abstract Algebra*, 2nd ed., Dover Publications, 2010.