

## 5. Homework

Due **Monday 10/20/04** before class

1. 3.2 (page 236)

- (3 points) 8
- (2 points) 18d
- (2 points) 24

2. 3.3 (page 253)

- (3 points) 8
- (3 points) 12
- (3 point) 20
- (3 point) 34
- (3 point) 42

3. 3.3 (page 255) **Wrong “proofs”.**

- (3 point) 50
- (3 point) 52

Hints how to find the errors:

- Try the claim for small values of  $n$ . Is it correct?
- Get the general idea of the “proof”, and try to redo it yourself (without looking at the original “proof”).
- Break the “proof” down into small steps, and verify which of the small steps are actually true. Verify every little detail of each step. Are there some steps left over that are somewhat suspicious to you?

Write down your thoughts for partial credit.