

Hints for Section 4.1 of Chapter 3

- **Problem 4.1** Recall Problem 3.5 on P. 114. Also, don't "explain." Just obtain v_0 values of 8 and 10.
- **Problem 4.2** Just do it for $m = 4$. I do expect you to see that for general m we have $v_m = 1 + \frac{1}{m} \sum_{k=1}^{m-1} v_k$, but *not* that the solution is $v_m = \sum_{k=1}^m \frac{1}{k}$.
- **Problem 4.7** You will need to use double expectation and the "Missing Theorem" stated in class just as we were beginning first step analysis (section 4 of Ch. 3).
- **Problem 4.15** See your answer to Problem 1.1 on page 99.