

**Ch.1 21-23**

Problem: Stuck on derivation of 21. (This problem is proven in Ch. 5)

**Ch.2 18.c** Prove that  $\sqrt{2} + \sqrt[3]{2}$  is irrational.

Problem: Can't find coefficients integer  $a_i$  such that  $0 = (\sqrt{2} + \sqrt[3]{2})^n + (\sqrt{2} + \sqrt[3]{2})^{n-1}a_{n-1} + \dots + a_0$ . This solution would imply that  $\sqrt{2} + \sqrt[3]{2}$  is irrational by 18.a.